

C A T A L O G
PLUMBING & HEATING
REPAIR ITEMS



Woodward-Wanger Co.

Philadelphia, Pa.



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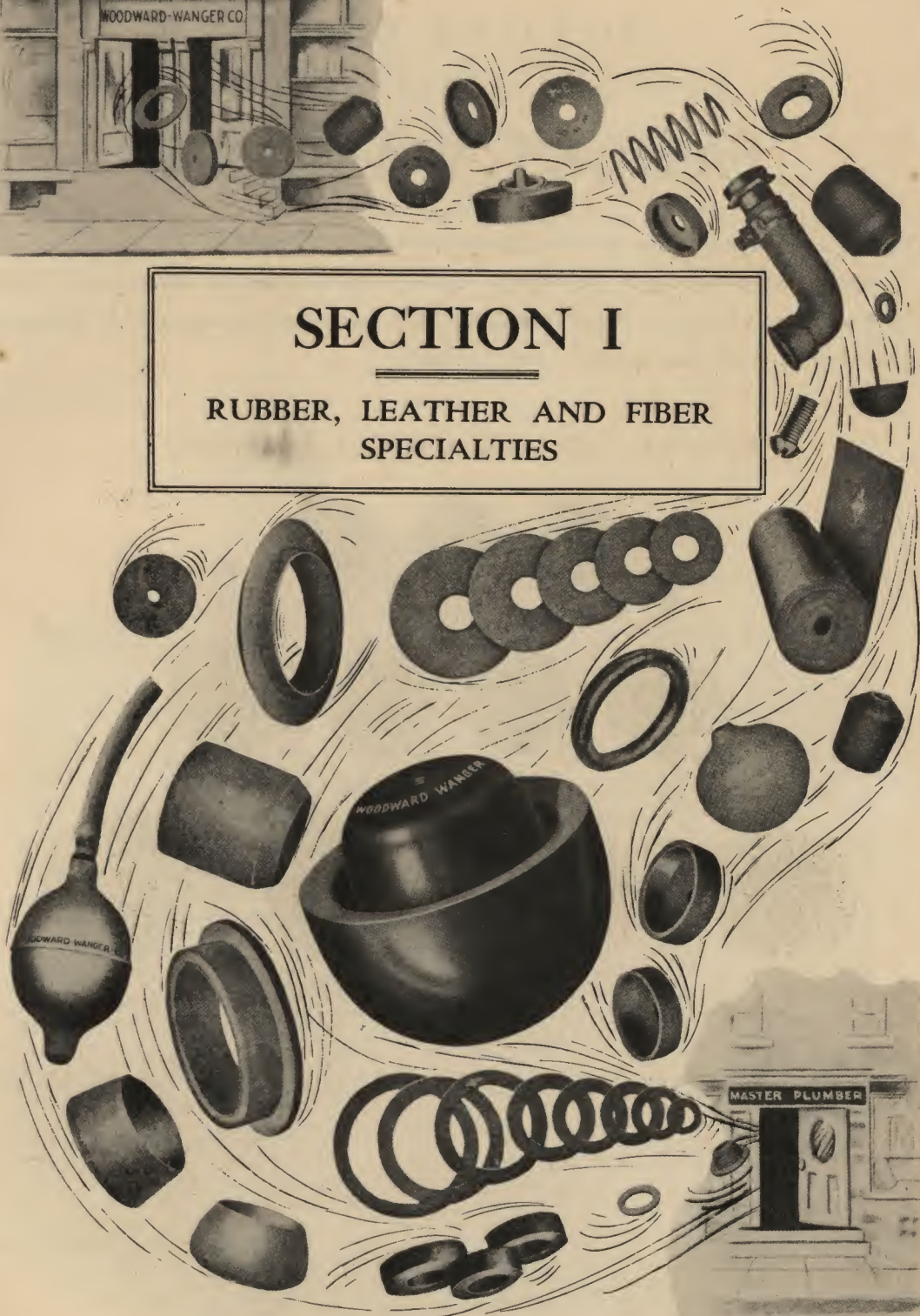
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SECTION I

RUBBER, LEATHER AND FIBER
SPECIALTIES



1948



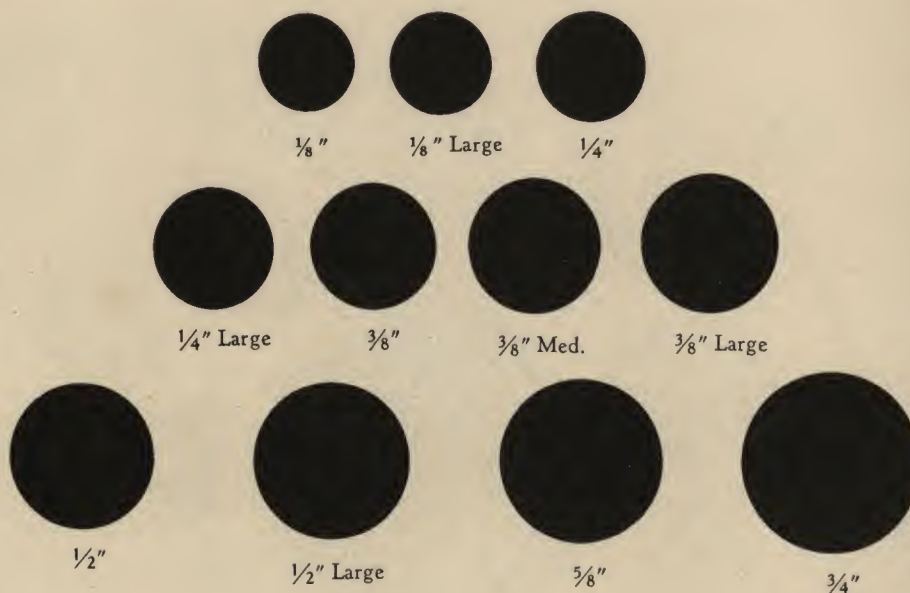
Woodward Wanger Co.



ACTUAL SIZES OF FAUCET WASHERS

No one seems to know how the sizes of sizes of washers originated. Many people order $\frac{1}{2}$ " washer when they really want a $\frac{1}{8}$ " washer for a $\frac{1}{8}$ " washer measures $\frac{1}{2}$ " O.D. For that reason we feel the actual sizes shown below, together with actual O.D. Measurements would, from time to time, come in handy.

ACTUAL SIZES OF FAUCET WASHERS



O. D. Measurements of Faucet Washers

Washer Size	Outside Diameter of Washer	Washer Size	Outside Diameter of Washer
$\frac{1}{8}$ " Measures	$\frac{1}{2}$ "	$\frac{3}{8}$ " Large..... Measures	$\frac{3}{4}$ "
$\frac{1}{8}$ " Large..... Measures	$\frac{3}{4}$ "	$\frac{1}{2}$ " Measures	$\frac{3}{4}$ "
$\frac{1}{4}$ " Measures	$\frac{1}{2}$ "	$\frac{1}{2}$ " Large..... Measures	$\frac{1}{2}$ "
$\frac{1}{4}$ " Medium..... Measures	$\frac{3}{4}$ "	$\frac{5}{8}$ " Measures	$\frac{3}{4}$ "
$\frac{1}{4}$ " Large..... Measures	$\frac{5}{8}$ "	$\frac{3}{4}$ " Measures	$\frac{1}{2}$ "
$\frac{3}{8}$ " Measures	$\frac{3}{4}$ "	1" Measures	$\frac{1}{2}$ "
$\frac{3}{8}$ " Medium..... Measures	$\frac{22}{32}$ "	$1\frac{1}{4}$ " Measures	$1\frac{1}{8}$ "



Woodward Wanger Co.



Testing Faucet Washers to find out their real worth—

No one can tell the value of a washer by looking at it. The same applies to paint, fabrics and all other material where the important factor is the length of satisfactory service it will give.

We are the only concern that puts washers through a practical durability test—the precise manner in which they are going to be used so we can determine their real value from a service standpoint.

The picture shown below was taken while our machine was in the Du Pont display room on the Atlantic City Boardwalk.

It was testing Rhino-Prene washers made of Du Pont's "Neoprene" and incidentally, tests prove that this washer will stand more punishment, and give much longer service than any other Faucet washer made.





Woodward Wanger Co.



Rhino-Prene Faucet Washers

Developed by Du Pont Engineers and the Woodward-Wanger Co. this Rhino-Prene washer showed an amazing resistance to abrasion. There are a lot of good washers on the market but Rhino-Prene will outlast them 3 to 1. Most of the well known brands failed between 80 and 96 hours. Rhino-Prene washers stood up and continued to give service up to 271 hours. Water in the faucets was kept at 200 degrees Fahrenheit and the faucets opened and closed 30 times per minute.

FLAT

No.	Size
029	$\frac{1}{8}$ "
030	$\frac{1}{8}$ " L
031	$\frac{1}{4}$ "
032	$\frac{1}{4}$ " L
033	$\frac{3}{8}$ "
034	$\frac{3}{8}$ " Med.
035	$\frac{3}{8}$ " L
036	$\frac{1}{2}$ "
037	$\frac{1}{2}$ " L
038	$\frac{5}{8}$ "

BEVELED

039	$\frac{1}{8}$ "
040	$\frac{1}{8}$ " L
041	$\frac{1}{4}$ "
042	$\frac{1}{4}$ " L
043	$\frac{3}{8}$ "
044	$\frac{3}{8}$ " Med.
045	$\frac{3}{8}$ " L
046	$\frac{1}{2}$ "
047	$\frac{1}{2}$ " L
048	$\frac{5}{8}$ "



Woodward Wanger Co.



"Rhino-Prene" Assortments

500 ASSORTMENTS

A-O-50 Flat

A-O-52 Beveled

CONTAINS

50 ... $\frac{1}{8}$ "	100 ... $\frac{1}{4}$ "	100 ... $\frac{1}{4}$ "L
100 ... $\frac{3}{8}$ "	100 ... $\frac{3}{8}$ "L	50 ... $\frac{1}{2}$ "

But assortment can be changed to meet the individual wishes or needs of the customer.



250 ASSORTMENTS

A-O-51 Flat

A-O-53 Beveled

CONTAINS

25 ... $\frac{1}{8}$ "	50 ... $\frac{1}{4}$ "	50 ... $\frac{1}{4}$ "L
50 ... $\frac{3}{8}$ "	50 ... $\frac{3}{8}$ "L	25 ... $\frac{1}{2}$ "

In strong cardboard box, with partitions. Assortment can be changed to meet wish of customer.



Woodward Wanger Co.



Never-Drip Faucet Washers

$\frac{1}{8}$ " Thick—Packed 100 to a Box

—SIZES—

No.	Size	No.	Size
059	$\frac{1}{8}$ "	058	$\frac{3}{8}$ " Med.
060	$\frac{1}{8}$ " Large	063	$\frac{3}{8}$ " Large
061	$\frac{1}{4}$ "	064	$\frac{1}{2}$ "
057	$\frac{1}{4}$ " Med.	065	$\frac{1}{2}$ " Large
072	$\frac{1}{4}$ " Large	066	$\frac{5}{8}$ "
062	$\frac{3}{8}$ "	067	$\frac{3}{4}$ "
		068	1"

The Distinctive Washer with the Black Stripe

Made of silk and cotton fiber, especially for us and there is no washer just like it on the market. A washer tested to a Million Faucet turns and a washer that will out wear and outlast all others on extremely Hot Water.



Woodward Wanger Co.



"Never-Drip" Assortments

500 ASSORTMENTS

A-O-74

500 Assortment

CONTAINS

50 ... $\frac{1}{8}$ "	100 ... $\frac{1}{4}$ "	100 ... $\frac{1}{4}$ "L
100 ... $\frac{3}{8}$ "	100 ... $\frac{3}{8}$ "L	50 ... $\frac{1}{2}$ "

But assortment can be changed to meet the individual wishes or needs of the customer.



250 ASSORTMENTS

A-O-75

250 Assortment

CONTAINS

25 $\frac{1}{8}$ "	50 $\frac{1}{4}$ "	50 $\frac{1}{4}$ "L
50 $\frac{3}{8}$ "	50 $\frac{3}{8}$ "L	25 $\frac{1}{2}$ "

In strong cardboard box, with partitions. Assortment can be changed to meet wish of customer.



Woodward Wanger Co.



Beveled "Rhino" Washers

No.	Size	No.	Size
64	$\frac{1}{8}$ " Reg.	71	$\frac{3}{8}$ " Med.
65	$\frac{1}{8}$ " Large	69	$\frac{3}{8}$ " Large
66	$\frac{1}{4}$ " Reg.	70	$\frac{1}{2}$ " Reg.
67	$\frac{1}{4}$ " Large	72	$\frac{1}{2}$ " Large
68	$\frac{3}{8}$ " Reg.	73	$\frac{5}{8}$ " Reg.

Flat "Rhino" Washers

No.	Size	No.	Size
143	$\frac{1}{8}$ " Reg.	151	$\frac{3}{8}$ " Med.
144	$\frac{1}{8}$ " Large	148	$\frac{3}{8}$ " Large
145	$\frac{1}{4}$ " Reg.	149	$\frac{1}{2}$ " Reg.
146	$\frac{1}{4}$ " Large	150	$\frac{1}{2}$ " Large
147	$\frac{3}{8}$ " Reg.	152	$\frac{5}{8}$ " Reg.



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“Rhino” Washer Assortments

500 ASSORTMENTS

A-153 Flat

A-78 Beveled

CONTAINS

50 ... $\frac{1}{8}$ "	100 ... $\frac{1}{4}$ "	100 ... $\frac{1}{4}$ " L
100 ... $\frac{3}{8}$ "	100 ... $\frac{3}{8}$ " L	50 ... $\frac{1}{2}$ "

But assortment can be changed to meet the individual wishes or needs of the customer.



250 ASSORTMENTS

A-154 Flat

A-79 Beveled

CONTAINS

25 ... $\frac{1}{8}$ "	50 ... $\frac{1}{4}$ "	50 ... $\frac{1}{4}$ " L
50 ... $\frac{3}{8}$ "	50 ... $\frac{3}{8}$ " L	25 ... $\frac{1}{2}$ "

In strong cardboard box, with partitions. Assortment can be changed to meet wish of customer.



Woodward Wanger Co.



FIBER

FLEXO

WASHERS

AN EXCELLENT MEDIUM PRICED FIBER WASHER



COTTON FIBER — GLYCERIN CURED

(Packed 100 to a Box)

TWO DIFFERENT THICKNESSES — TWO DEGREES OF HARDNESS

THICK SOFT $\frac{3}{16}$ " THICK

No.	Size
29	
30	
40	
31	
32	
33	
34	
35	
36	
37	

THIN HARD $\frac{1}{8}$ " THICK

No.	Size
0	$\frac{1}{8}$ "
1	$\frac{1}{4}$ "
11	$\frac{1}{4}$ "L
2	$\frac{3}{8}$ "
3	$\frac{3}{8}$ "L
4	$\frac{1}{2}$ "
5	$\frac{1}{2}$ "L
6	$\frac{5}{8}$ "
7	$\frac{3}{4}$ "



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Bell Supply Washers



COTTON FIBER

	Thickness	Hole	Diam.
42	1/4 in.	3/8 in.	1 1/8 in.

RUBBER

No.	Thickness	Hole	Diam.
44	1/4 in.	3/8 in.	1 1/8 in.
45	1/4 in.	3/8 in.	1 1/8 in.
46	1/4 in.	3/8 in.	1 1/4 in.

Mueller Double Seat Washers



90

91

92

93

Use Prefix "S" for Soft and "H" for Hard

No.	Outside Diameter
90	1 1/2 in.
91	1 1/2 in.
92	1 1/2 in.
93	1 1/2 in.

For "Kohler" Fixtures



Our No.	Kohler No.	Inside Dia.	Out. Dia.
O-59	10745-3/8"	3/16"	1/2"
O-72	10745-1/2"	3/16"	5/8"
O-66	10745-3/4"	3/16"	7/8"

Bashlin Washers



Our No.

130	3/8" Seat Rings; H-Measures 7/16"
131	1/2" Seat Rings; H-Measures 1/2"
132	3/4" Seat Rings; H-Measures 9/16"

For "Standard" Fixtures



Our No.	Outside Dia.	Inside Dia.	Thick
29-S	1/2"	7/32"	3/16"
29-H	1/2"	7/32"	3/16"
O-58	11/16"	3/16"	1/8"
O-60	17/32"	3/16"	1/8"
O-72	5/8"	3/16"	1/8"

For "Speakman" Faucets



Never Drip

No. O-65	(13/16")	Same as Speakman K-6730 for High Seat Valve
No. O-64	(3/4")	Same as Speakman K-6735 for Exposed 1/2" Valve
No. O-58	(11/16")	Same as Speakman K-6740 for Sink Fixtures
No. O-72	(5/8")	Same as Speakman K-6745 for 5" Lavatory Valve



Woodward Wanger Co.



Red Fiber Bibb Washers



No.	Size	No.	Size
105.....	1/4"	108.....	1/2"
104..... (large)	1/4" L	109..... (large)	1/2" L
106.....	3/8"	110.....	3/8"
107..... (large)	3/8" L	111.....	3/4"

Vim Chrome Leather Washers



No.	Size	No.	Size
135.....	1/4"	137 1/2..... (large)	1/2" L
135 1/2..... (large)	1/4" L	138.....	3/8"
136.....	3/8"	139.....	3/4"
136 1/2..... (large)	3/8" L	140.....	1"
137.....	1/2"		

EXTREMELY SOFT WASHERS for SELF-CLOSING FAUCETS

The same tough stock used to make "Rhino" Washers, only much softer for self-closing Faucets.



No. 155	1/4"	No. 158	3/8" L
No. 156	1/4" L	No. 159	1/2"
No. 157	3/8"	No. 160	1/2" L



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Solid Faucet Discs

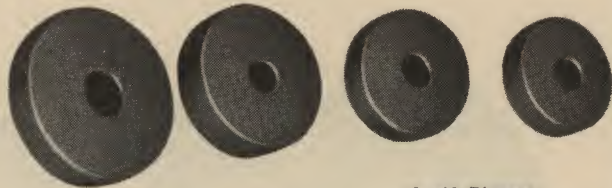
Rubber



$\frac{1}{4}$ " Thick

No.	Out. Dia.	Size
201.....	$\frac{3}{4}$ in.	$\frac{1}{2}$ in.
202.....	$\frac{7}{8}$ in.	$\frac{5}{8}$ in.

CRANE WASHERS



Outside Diameter
of Washer

204—Crane No. 2.....	$\frac{19}{32}$ in.
205—Crane No. 4.....	$\frac{21}{32}$ in.
208—Crane No. 6.....	$\frac{3}{4}$ in.
209—Crane No. 8.....	$\frac{7}{8}$ in.

Chicago Faucet Repairs

Quatern Repairs



No. 210 (Part 1-14) $1\frac{1}{4}$ " Hex.
Cap Chrome



No. 210 $\frac{1}{2}$ (Part 1-43) Cap
Gasket



No. 211 (Part 1-99) Right
Hand unit less Cap

No. 211 $\frac{1}{2}$ (Part 1-100) Left
Hand unit less Cap

NOTE

No. 212 (No. 377) Left Hand unit with
long stem for lavatory fixtures with
concealed caps.

No. 212 $\frac{1}{2}$ (No. 274-3) Left Hand long
type stem for lavatory fixtures.

No. 213 (No. 274-4) Rough Brass Cap
for lavatory fixtures.



No. 213 $\frac{1}{2}$ (No. 177-39) Long Handle
Screw for China Handles No. 237.

No. 214 (No. 420-10) Handle Screw for
No. 368 and No. 369 Lever Handles.



No. 214 $\frac{1}{2}$ (Part 1-17) Handle Screw.

No. 215 (Part 1-19) Asbestos Packing
Washer.



No. 215 $\frac{1}{2}$ (Part 1-20) Brass
Flat Washer $\frac{13}{16}$ " Outside
Diameter.

No. 216 (Part 1-15) Right
Hand Stem.

No. 216 $\frac{1}{2}$ (Part 1-16) Left
Hand Stem.

No. 217 (Part 1-28) Left Hand
Sleeve.

No. 217 $\frac{1}{2}$ (Part 1-29) Right
Hand Sleeve.

No. 218 (Part 1-27) Monel
Metal Seat $\frac{13}{16}$ " Outside
Diameter.

No. 206-H (Part 1-21) Hard
Rubber Seat Washer.

No. 206-S (Part 1-21) Soft
Rubber Seat Washer.

No. 207 (Part 1-22) Brass
Washer Retainer $\frac{5}{8}$ " Out-
side Diameter.

No. 219 (Part 1-31) Stem
Nut Washer $\frac{7}{16}$ " Outside
Diameter.

No. 219 $\frac{1}{2}$ (Part 1-18) Stem
Nut.

All Numbers Shown in Brackets () are the Manufacturers own Catalog Numbers.



Woodward Wanger Co.



Trico Top Bibb Washers



Seven layers of Stockinet
with pure Para Rubber

The **Trico** is made from seven layers of this Stockinet, closely cemented together with **Pure Para Rubber** and the stock thus made is cured under heavy pressure. From this stock is cut the various sizes of the Trico Washers, extreme care being used at every step of the making to insure uniform thickness and accurate sizes.

No.	Size
224	$\frac{1}{8}$ in. O. D.
225	$\frac{3}{8}$ in.
226	$\frac{1}{2}$ in.

No.	Size
227	$\frac{5}{8}$ in.
228	$\frac{3}{4}$ in.
229	1 in.

Cloth Inserted Top Washers



No.	Size
239	$\frac{1}{8}$ in. O. D.
240	$\frac{3}{8}$ in.
241	$\frac{1}{2}$ in.

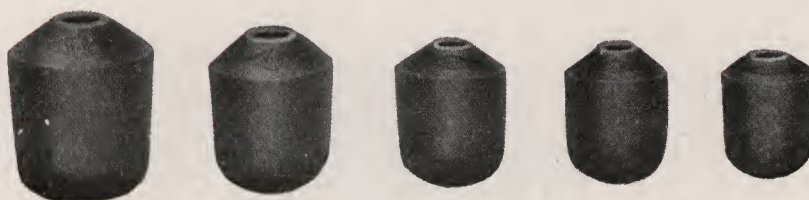
No.	Size
242	$\frac{5}{8}$ in.
243	$\frac{3}{4}$ in.



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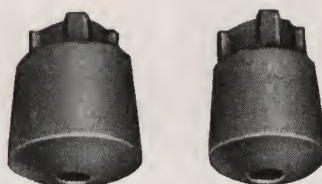


The "Enduro" Fuller Ball



No.	Size
270	$\frac{3}{8}$ in.
271	$\frac{1}{2}$ in.
272	$\frac{5}{8}$ in.
273	$\frac{3}{4}$ in.
274	$\frac{7}{8}$ in.
275	$\frac{1}{2}$ in.
276	$\frac{3}{4}$ in.
277	$\frac{7}{8}$ in.
278	1 in.

Special Fuller Balls FOR "PECK" FIXTURES



FOR PECK FIXTURES

No.	Size
280	$\frac{1}{2}$ in.
281	$\frac{5}{8}$ in.



Woodward Wanger Co.



The Master Plumber's Tank Ball



CUSHIONED
MUSHROOM
Parabal



Made in these
SIZES

No. 282	 2"
No. 284	 2 1/4"
No. 285	 2 3/8"
No. 286	 2 1/2"
No. 287	 2 5/8"
No. 288	 2 3/4"



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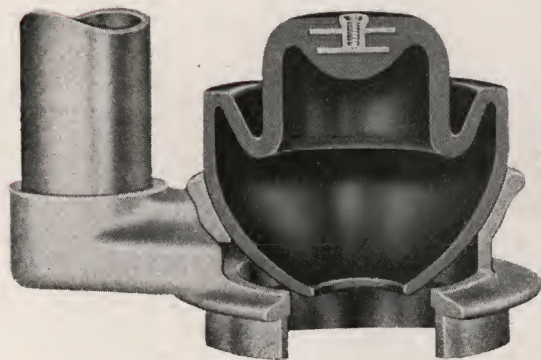
The Best Tank Ball ever made!



CUSHIONED MUSHROOM Parabal

Here is a different and better tank ball, The U. S. Patent Office decided it had improved features found in no other tank ball and issued it Patent No. 1,592,570.

The Mushroom Paralbal gives the Master Plumber a tank ball to sell that is different from any other—distinctive in shape, Nationally Advertised, and sold only through Master Plumbers.



**NOTE THE PERFECT SEAT
A POSITIVE WATER SEAL**

Has the same curvature as the Flush Valve, instead of sitting on the rim and making a hair line seal, like many balls do.



The Paralbal Spud is much larger than any other, and different in shape. Can never pull out or twist.



Woodward Wanger Co.



AN EXTREMELY GOOD MEDIUM PRICED BALL

KONEBAL



We honestly believe that this modestly priced tank ball represents the most value ever offered within the same price range. It is made from a much better quality of rubber than most manufacturers deem necessary in a ball sold at this price.



Packed Egg Crate Fashion

No.	
295-B	2 1/2 in.
296-B	2 3/4 in.
297-B	2 3/8 in.

Individually Boxed

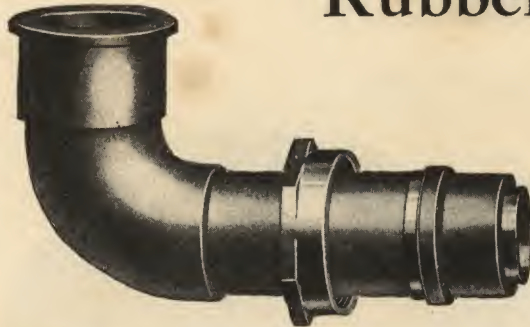
No.	
295	2 1/2 in.
296	2 3/4 in.
297	2 3/8 in.



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Rubber Elbows



No. 320

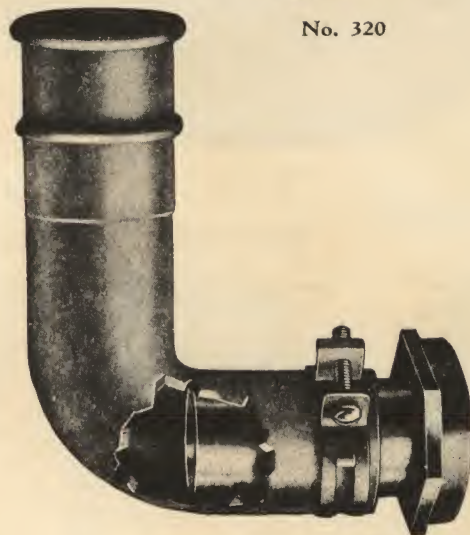
Regular Pattern Rubber Elbows

With Straight Brass Ferrule

No.	Size Outlet	Size for Flush Pipe	Length Back to End	Height
320	1 1/4 in.	1 1/4 in.	5 1/2 in.	3 in.

320-R

Same as illustrated above, only -R means Rubber Only, no Metal trimmings.



No. 326

Extra Long Inlet Rubber Elbow

No.	Size Outlet	Size for Flush Pipe	Length Back to Spud End	Height
326	1 1/4 in.	1 1/4 in.	5 in.	4 3/4 in.

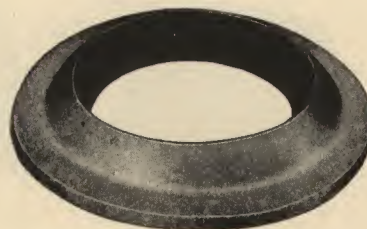
326-R

Same as illustrated above, only -R means Rubber Only, no Metal trimmings.

Gaskets

Basin Gaskets

No.	Size Inside Diameter	Size Outside Diameter
365	1 1/4 in.	2 in.



Bath Gaskets

No.	Size Inside Diameter	Size Outside Diameter
367	1 5/8 in.	2 5/8 in.
368	1 7/8 in.	2 9/8 in.



Woodward Wanger Co.



Gaskets



No. 369

Sink Gaskets

No.	Size Inside Diameter	Size Outside Diameter
369	1½ in.	2⅝ in.



No. 370

Sink Gaskets

No.	Inside Diameter	Outside Diameter
370.....	1¼ in.	2½ in.

Waste Washers

Ideal Waste Washers—Light



No. 380



No. 381



No. 382

No.	Size
380	1 in.
381	1¼ in.
382	1½ in.

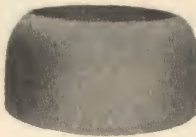


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Waste Washers

Ideal Waste Washers—Heavy

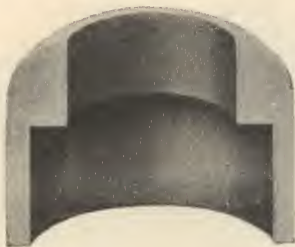


No.	Size
385	1 in.
386	1¼ in.
387	1½ in.

Model Waste Washers



No.	Size
390	1 in.
391	1¼ in.
392	1½ in.



No.	Size
395	1 in.
397	1½ in.
398	1⅝ in.



Waste Washers—Electric

No.	Size
410	Basin
411	Bath



Waste Washers

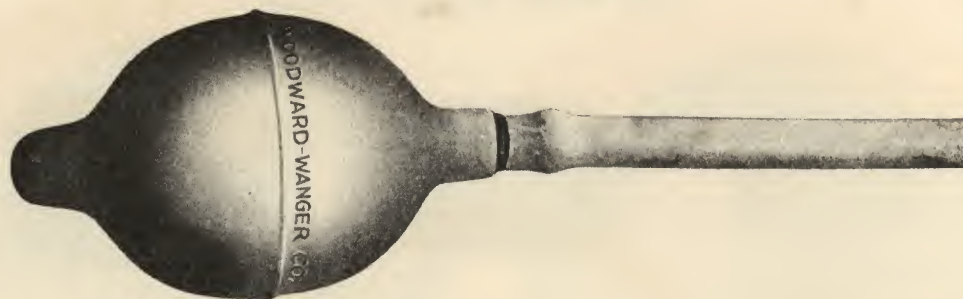
No.	Size
400	Basin



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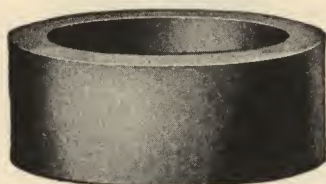


Furnace Bulbs



No. 450 Diameter 2 in.

Closet Spud Washers

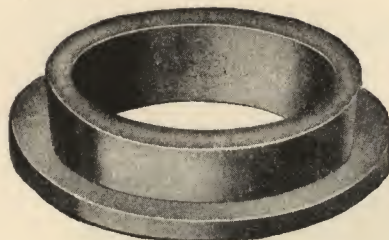


Packed 12 per Carton

No.	Size	Inside Diameter	Outside Diameter	Height
467	2 in.	2 in.	2 $\frac{3}{8}$ in.	$\frac{3}{4}$ in.

Closet Spud Washers—Flanged

Packed 12 per Carton



No.	Size	Inside Diameter at Top	Inside Diameter at Base	Outside Diameter of Flange
470...	1 $\frac{1}{4}$ in.	1 $\frac{7}{8}$ in.	1 $\frac{5}{8}$ in.	2 $\frac{1}{2}$ in.
471...	1 $\frac{1}{2}$ in.	1 $\frac{1}{8}$ in.	1 $\frac{7}{8}$ in.	2 $\frac{3}{4}$ in.
472...	2 in.	2 $\frac{3}{8}$ in.	2 $\frac{1}{4}$ in.	3 $\frac{1}{4}$ in.
473...	Special	2 $\frac{1}{8}$ in.	2 $\frac{1}{8}$ in.	3 in.

Reducing Closet Spud Washers

REDUCING CLOSET SPUD WASHERS



474...	2 in.	2 $\frac{1}{2}$ in.	1 $\frac{9}{16}$ in.	3 in.
475...	2 in.	2 $\frac{1}{2}$ in.	1 $\frac{7}{8}$ in.	3 in.

Closet Spud Washers—Beveled

Packed 12 per Carton



No.	Size	Inside Diameter	Outside Diameter	Height
478.....	1 $\frac{1}{4}$ in.	1 $\frac{9}{16}$ in.	2 $\frac{3}{8}$ in.	$\frac{7}{16}$ in.
479.....	2 in.	2 $\frac{1}{4}$ in.	3 $\frac{1}{8}$ in.	$\frac{7}{16}$ in.



Woodward Wanger Co.



Flush Valve Washers



Nos. 490-491



No. 492.

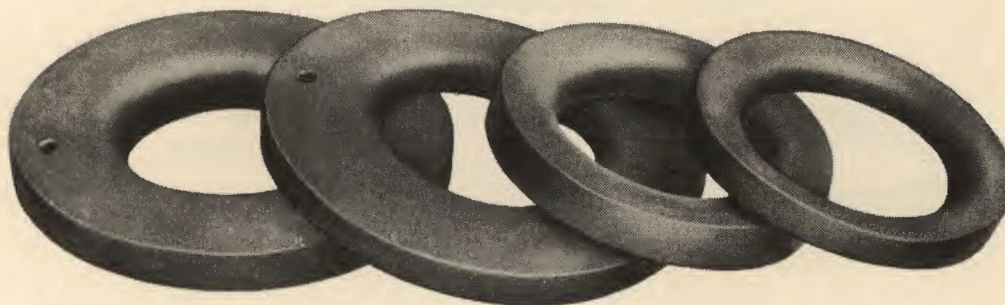


No. 495

No.	Size	Size	For Use with Valve for
	Inside Diameter	Outside Diameter	
490....	1 $\frac{7}{8}$ in.	2 $\frac{5}{8}$ in.	High Tank
491....	2 $\frac{1}{4}$ in.	3 $\frac{3}{8}$ in.	Low Tank
492....	2 $\frac{1}{4}$ in.	3 $\frac{1}{2}$ in.	Low Tank
495....	2 $\frac{1}{4}$ in.	3 in.	Low Tank

Sponge Rubber Gaskets

For Setting Closet Bowls



Made of High-Grade
Sponge Rubber

	O.D.	I.D.	THICK
No. 504	5 $\frac{3}{8}$ "	3 $\frac{1}{2}$ "	$\frac{1}{8}$ "
No. 505	5 $\frac{3}{8}$ "	3 $\frac{1}{2}$ "	$\frac{3}{4}$ "
No. 505 $\frac{1}{2}$...	5 $\frac{3}{8}$ "	3 $\frac{1}{2}$ "	1"

LIP TYPE

	O.D.	I.D.	THICK
No. 506	6 $\frac{3}{4}$ "	3 $\frac{1}{2}$ "	$\frac{1}{8}$ "
No. 507	6 $\frac{3}{4}$ "	3 $\frac{1}{2}$ "	$\frac{3}{4}$ "
No. 508	6 $\frac{3}{4}$ "	3 $\frac{1}{2}$ "	1"



Woodward Wanger Co.

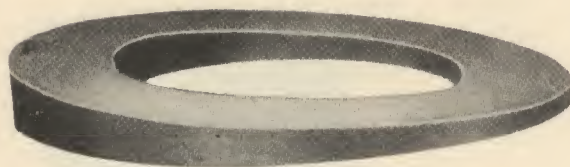


Testing Plug Rings



No.	Size
510	2 in.
511	3 in.
512	4 in.
513	5 in.
514	6 in.

C. W. & O. Washer



Beveled C. W. & O. Washer For Connected Waste and Overflow

No.	Size Inside Diameter	Size Outside Diameter
520	1 $\frac{1}{8}$ in.	2 $\frac{1}{8}$ in.
	Least Thickness 1 $\frac{1}{8}$ in.	Greatest Thickness $\frac{9}{32}$ in.

Gaskets



Faucet Flange Gasket Pure White Rubber

No.	
524	2 inch O. D. x 1 inch I. D. x $\frac{3}{32}$ inch thick



Flat Washer for Bath Waste

No.	Size Inside Diameter	Size Outside Diameter
525	1 $\frac{1}{8}$ in.	2 $\frac{3}{8}$ in.



Woodward Wanger Co.



Gauge Glass Washers



Gauge Glass Washers—Square
LIGHT

No.	Inside Diameter	Outside Diameter	Height
532	$\frac{9}{16}$ in.	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.
533	$\frac{11}{16}$ in.	1 in.	$\frac{1}{4}$ in.

Gauge Glass Washers—Square
HEAVY

No.	Inside Diameter	Outside Diameter	Height
535	$\frac{7}{8}$ in.	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.
536	$\frac{9}{8}$ in.	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.
537	$\frac{11}{8}$ in.	$1\frac{1}{8}$ in.	$\frac{1}{4}$ in.



Gauge Glass Washers—Round
Packed 100 Per Carton

No.	Size
540	$\frac{1}{2}$ in.
542	$\frac{3}{4}$ in.



Royal Hose Connection Washer

Packed 12 Per Carton

No.	Size
552	For $\frac{1}{2}$ in. Faucets
553	For $\frac{3}{8}$ in. Faucets



Woodward Wanger Co.

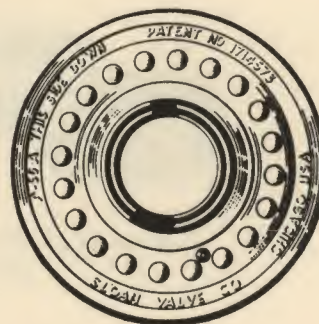


Sloan Diaphragms

Sloan Valve Diaphragms FOR IMPROVED "ROYAL"

Packed 12 to a Carton

No. Size
565-S..... 3 1/4 in. Outside Diameter



Low Pressure Diaphragms

Made of a good grade of rubber



No.	Size
570	6 in.
571	7 in.
572	8 in.
573	9 in.

Syphon Valve Washers (FEATHER EDGE STYLE)



WILL SEAT
PERFECTLY

CAREFULLY
PACKED

PACKED 12 PER CARTON

No.	Size
585	1 1/8 in.
586	1 1/4 in.
587	1 3/8 in.
588	1 1/2 in.
589	1 5/8 in.
590	1 3/4 in.
591	2 in.



Woodward Wanger Co.



Half Round Tank Washers

For Budde and McShane Tanks, Etc.

Packed 12 Per Carton

No.	Size
612	1 in.
613	1 1/4 in.
614	1 1/2 in.

Half Round



Plunger Rings—Pure Soft Gum



Packed 12 Per Carton

	Size Inside Diameter	Size Outside Diameter
624	1 1/4 in.	2 1/4 in.
625	1 1/2 in.	2 1/4 in.
626	1 1/2 in.	2 7/8 in.

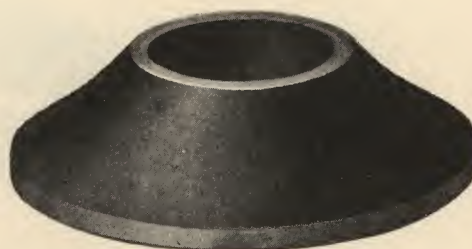
Monarch Tank Packing

Extra Quality Rubber

For Monarch and Gravity Tanks, etc.

Packed 6 Per Carton

No.	Size
660	1 x 2 1/2 x 3/4 in.



Closet Tank Washers



Syphon Packers
FOR WOLFF TANKS, ETC.

No.	Size Inside Diameter	Size Outside Diameter
655	1 1/4 in.	2 1/4 in.
656	1 7/8 in.	3 1/4 in.
657	2 1/8 in.	3 7/8 in.



Woodward Wanger Co.



Tank Washers

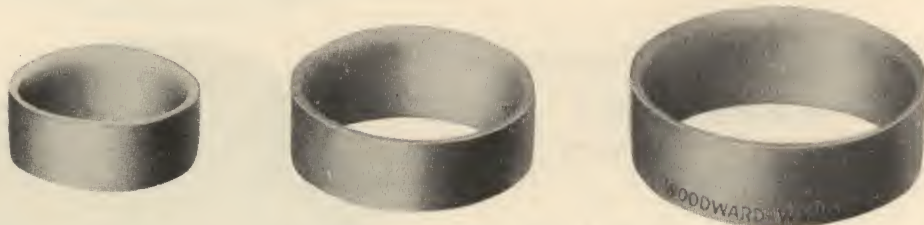


For Enterprise, Hogan, Standard Valves, Etc.

Packed 12 Per Carton

No.	Inside Diameter	Outside Diameter	Thickness
667	1 ¹ / ₈ in.	2 ³ / ₈ in.	¹ / ₈ in.
668	1 ¹ / ₄ in.	1 ³ / ₄ in.	¹ / ₈ in.
669	1 ¹ / ₄ in.	2 ³ / ₈ in.	¹ / ₈ in.
670	1 ¹ / ₄ in.	2 ¹ / ₂ in.	¹ / ₈ in.
671	1 ⁵ / ₈ in.	2 ³ / ₈ in.	¹ / ₈ in.
672	1 ⁷ / ₈ in.	2 ³ / ₄ in.	¹ / ₈ in.
673	1 ¹ / ₂ in.	2 ⁷ / ₈ in.	¹ / ₈ in.
674	1 ¹ / ₈ in.	3 in.	¹ / ₈ in.

Closet Tank Washers



C. & D. Tank Valve Washers

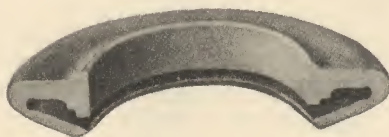
Packed 12 Per Carton

No.	Size
700	1 in.
701	1 ¹ / ₄ in.
702	1 ¹ / ₂ in.

Cushion Tank Washer

C. & D. Double-Seat Cushion Tank Washer

Packed 12 Per Carton



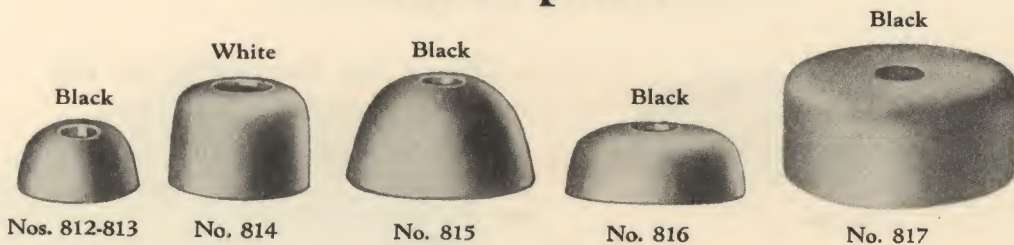
No.	Size
703	1 ³ / ₈ in.
704	1 ⁵ / ₈ in.



Woodward Wanger Co.



Bumpers



Plain Bumpers
WITH RECESS FOR SCREW

812	Black	.....	$\frac{1}{2}$ in.	815	Black	.....	$\frac{1}{8}$ in.
813	Black	.....	$\frac{5}{8}$ in.	816	Black	.....	1 in.
814	White	.....	$\frac{3}{4}$ in.	817 (For Tack)	Black	.....	$1\frac{1}{4}$ in.

White Tack Bumpers



No.		Size	No.		Size
840	.....	$\frac{3}{8}$ in.	843	.....	$\frac{3}{4}$ in.
841	.....	$\frac{1}{2}$ in.	844	.....	$\frac{7}{8}$ in.
842	.....	$\frac{5}{8}$ in.			



**Flat Top Round
Seat Bumper**

No. 825 — White Round
Bumper, 1" diameter, $\frac{1}{2}$ " high,
 $\frac{3}{8}$ " tack.
No. 826—Same in Black.

Closet Seat Bolt Bumpers



847..... Half Round
848..... Flat

Oblong Seat Bumpers—Flat Top
COMPLETE WITH BRASS TACKS



No.	Color	Length	Height	Width
850	White	$1\frac{1}{8}$ in.	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.
852	White	$2\frac{1}{8}$ in.	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.



Woodward Wanger Co.



Seat Bumpers



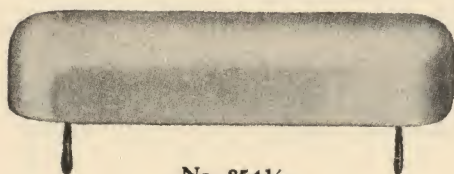
No. 854

Oblong Seat Bumpers—Oval Top

Complete with Brass Screws

Packed 50 per Carton

No.	Color	Length	Height	Width
854	White	2½ in.	½ in	⅞"



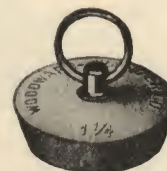
No. 854½

Oblong Tack Bumper—White

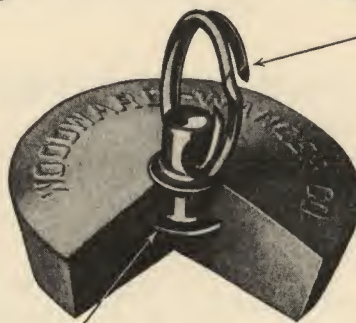
Flat Top—Oval Sides and Rounded Ends

No.	Color	Length	Height	Width
854½	White	2½"	7/16"	⅞"
854¾	—Same in Black			

Solid Rubber Stoppers



HIGHEST QUALITY SOLID RUBBER



SPLIT RING

THE SAME AS
A KEY RING
WILL NEVER
PULL LOOSE



WIDE ANCHOR ON RING POST
PREVENTS PULLING OUT

No.	Size	No.	Size
857	1 in.	861	1½ in.
858	1⅛ in.	862	1⅝ in.
859	1¼ in.	863	1¾ in.
860	1⅜ in.	864	2 in.
865	1⅞ in.		



Woodward Wanger Co.



Suction Stoppers



No. 889

Suction Bath and Basin Stopper

No.	For	Diameter
889	Sink	5 in.

Rubber Sheet Packing



Nos. 900-902

WIDTH—36"

Guaranteed to give satisfaction for all purposes for which this style of packing is generally used. It possesses great heat resistance, and being made from a base of Pure Para Rubber will keep in good usable condition for an indefinite time.

Sold in any length desired, but cut to the full width of the sheet.

No.	Thickness	Weight per Sq. Yd.
900 W-W Co. Red Rubber Sheet Packing	$\frac{1}{16}$ in.	6 lbs.
901 W-W Co. Red Rubber Sheet Packing	$\frac{3}{32}$ in.	9 lbs.
902 W-W Co. Red Rubber Sheet Packing	$\frac{1}{8}$ in.	12 lbs.

Pure Gum Sheet Packing

WIDTH—36"

This is one of the best grades of pure rubber sheet; very useful for making certain special washers, which must be soft and flexible and give durable wear.

Sold in any length desired, but cut to the full width of the sheet.

ORDER BY NUMBER

No.	Thickness	Weight per Sq. Yd.
905 W-W Co. Pure Gum Sheet Packing	$\frac{1}{8}$ in.	10 lbs.



No. 905



Woodward Wanger Co.



Cloth Inserted Sheet Packing



WIDTH—36 IN.

W-W Co. Cloth Inserted Sheet Packing is of the highest grade and guaranteed to give lasting satisfaction. Width, 36 in. Sold in any length desired, cut to the full width of the sheet.

ORDER BY NUMBER

No.	Thickness	Weight per Sq. Yd.
908	W-W Co. C. I. Sheet Packing	$\frac{1}{8}$ in. 12 lbs.

Leather Sheet Packing

Oak Tanned Leather

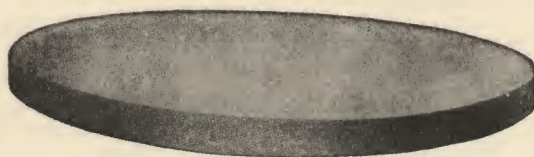
Fine Oak Tanned stock, especially selected for plumbers' use. In various sized pieces up to 12 x 20 ins.

910.....Oak Tanned

Oil Tanned Leather

Selected stock carefully tanned in oil. A fine article for making special washers.

No.
911.....Oil Tanned



No. 915

Leather Discs

OAK TANNED

Packed 50 per Carton

No.	Size	Thickness
915.....	$2\frac{1}{4}$ in. O. D.	$\frac{1}{8}$ in.



Woodward Wanger Co.



Valve Discs For Jenkins Valves



HARD—WITH ROUND HOLE

Packed 100 per Carton

No.	Size	No.	Size
925.....	1/4 in.	929.....	1 in.
926.....	3/8 in.	930.....	1 1/4 in.
927.....	1/2 in.	931.....	1 1/2 in.
928.....	3/4 in.	932.....	2 in.



Valve Discs

RUBBER VALVE DISCS—ROUND HOLE

960.....	7/8" I. D.	1 3/8" O. D.	1/4" Thick
961.....	1 1/2" I. D.	1 5/8" O. D.	5/8" Thick
962.....	1 7/8" I. D.	2 1/8" O. D.	3/8" Thick

Flexo Union Washers



Thickness—1/8 in.

Nos. 992-999

No.	Size Union	Inside Diameter	Outside Diameter
992.....	1/4 in.	3 1/2 in.	1 1/16 in.
993.....	3/8 in.	1 1/8 in.	1 in.
994.....	1/2 in.	7/8 in.	1 3/8 in.
995.....	3/4 in.	1 1/8 in.	1 7/8 in.
996.....	1 in.	1 1/2 in.	1 3/4 in.
997.....	1 1/4 in.	1 7/8 in.	2 1/8 in.
998.....	1 1/2 in.	1 3/4 in.	2 3/8 in.
999.....	2 in.	2 3/8 in.	2 1/2 in.



Woodward Wanger Co.

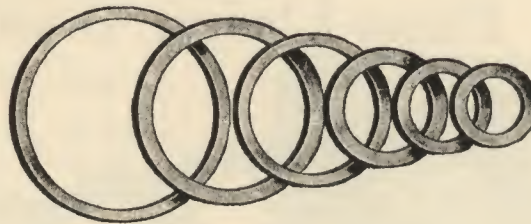


Rubber Union Washers



No.	Size Union	Inside Diameter	Outside Diameter
1017.....	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$\frac{7}{8}$ in.
1018.....	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.	1 in.
1019.....	$\frac{1}{2}$ in.	$\frac{3}{4}$ in.	$1\frac{1}{4}$ in.
1020.....	$\frac{3}{4}$ in.	$\frac{1}{2}$ in.	$1\frac{1}{2}$ in.
1021.....	1 in.	$1\frac{1}{8}$ in.	$1\frac{3}{4}$ in.
1022.....	$1\frac{1}{4}$ in.	$1\frac{3}{8}$ in.	$2\frac{1}{8}$ in.
1023.....	$1\frac{1}{2}$ in.	$1\frac{5}{8}$ in.	$2\frac{3}{8}$ in.
1024.....	2 in.	$2\frac{3}{8}$ in.	$2\frac{1}{2}$ in.

Rubber Slip-joint Washers



No.	To Slip Over	Size Enters Nut
1042.....	$\frac{1}{8}$ in. I. P.	$\frac{3}{8}$ in. I. P.
1043.....	$\frac{1}{8}$ in. I. P.	$\frac{1}{2}$ in. I. P.
1044.....	$\frac{1}{4}$ in. I. P.	$\frac{1}{2}$ in. I. P.
1045.....	$\frac{3}{8}$ in. I. P.	$\frac{3}{4}$ in. I. P.
1046.....	$\frac{3}{8}$ in. O. D. Tube	$\frac{3}{8}$ in. I. P.
1047.....	$\frac{3}{8}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
1048.....	$\frac{7}{8}$ in. O. D. Tube	$\frac{3}{8}$ in. I. P.
1049.....	$\frac{7}{8}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
1050.....	$\frac{1}{2}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
1051.....	$\frac{7}{8}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
1052.....	$\frac{7}{8}$ in. O. D. Tube	$\frac{3}{4}$ in. I. P.
1053.....	$\frac{1}{2}$ in. O. D. x $\frac{1}{2}$ in. I. D. x $\frac{1}{8}$ in. Thick	$\frac{3}{4}$ in. I. P.
1054.....	$\frac{3}{4}$ in. O. D. Tube	$\frac{3}{4}$ in. I. P.
1055.....	1 in. O. D. Tube	1 in. I. P.
*1056.....	$1\frac{1}{4}$ in. O. D. Tube (Thin)	See Note.
1057.....	$1\frac{1}{4}$ in. O. D. Tube (Reg.)	$1\frac{1}{4}$ in. I. P.
1058.....	$1\frac{1}{4}$ in. O. D. Tube	$1\frac{1}{2}$ in. I. P.
1059.....	$1\frac{3}{8}$ in. O. D. Tube	$1\frac{1}{4}$ in. I. P.
1060.....	$1\frac{3}{8}$ in. O. D. Tube	$1\frac{1}{2}$ in. I. P.
*1061.....	$1\frac{1}{2}$ in. O. D. Tube (Thin)	See Note.
1062.....	$1\frac{1}{2}$ in. O. D. Tube (Reg.)	$1\frac{1}{2}$ in. I. P.
1063.....	$1\frac{1}{2}$ in. O. D. Tube	2 in. I. P.
1064.....	2 in. O. D. Tube	2 in. I. P.

* Note—Nos. 1056 and 1061 are used in making slip-joint connections at inlet of $\frac{1}{4}$ and $1\frac{1}{2}$ in. Bent Tube Traps.



Woodward Wanger Co.



Slip Joint Washers for Traps

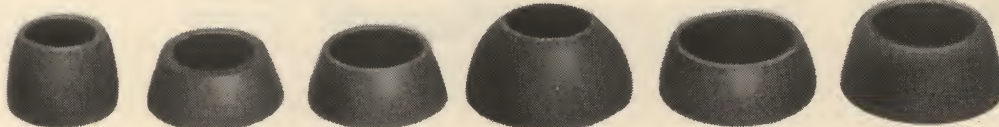


Trap Slip Joint Washer

—Black Rubber—

No. 1070 — $1\frac{1}{4}$ " I. D., $1\frac{11}{16}$ " O. D. for $1\frac{1}{2}$ " Trap Slip Joint Nuts to slip $1\frac{1}{4}$ " Tube.

Beveled Slip-joint Washers



1101

1102

1103

1104

1103-S

1105

No.	Hole	O. D. at Base	Height	Enters Nut Size
1101.....	$\frac{3}{8}$ in.	$\frac{37}{64}$ in.	$\frac{1}{2}$ in.	$\frac{3}{8}$ in. I. P.
1102.....	$\frac{7}{8}$ in.	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{2}$ in. I. P.
1103.....	$\frac{1}{2}$ in.	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{2}$ in. I. P.
1103-S.....	$\frac{5}{8}$ in.	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.	Used on W-W Compound Lever Ballcock
1104.....	$\frac{7}{8}$ in.	$\frac{7}{8}$ in.	$\frac{3}{8}$ in.	$\frac{3}{4}$ in. I. P. (See Note)
1105.....	$\frac{1}{8}$ in.	$\frac{7}{8}$ in.	$\frac{1}{2}$ in.	$\frac{3}{4}$ in. I. P. (See Note)
1107.....	$\frac{3}{8}$ in.	$\frac{5}{8}$ in.	$\frac{1}{8}$ in.	Basin Faucet Coupling Nut and $\frac{7}{8}$ in. Swedge Supplies and Handy Basin Supply
1108.....	$\frac{7}{8}$ in.	$\frac{3}{4}$ in.	$\frac{1}{8}$ in.	Ideal and Success Float Valve (Ball Cock) Coupling Nuts

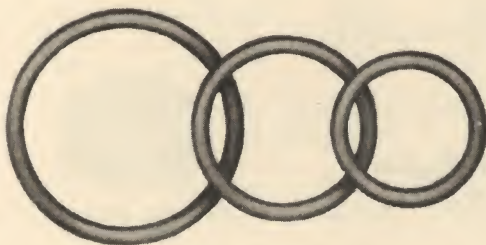


1107

1108

Note.—Nos. 1104, 1105 and 1106 are also intended for use with Bath Faucet Couplings.

Round Slip-joint Washers



Packed 50 per Carton

No.	Size To Slip Over	Size Enters Nut
1111	$1\frac{1}{4}$ in. Tube (See Note)	$\frac{1}{4}$ in. I. P.
1113	$1\frac{1}{2}$ in. Tube	$\frac{1}{2}$ in. I. P.

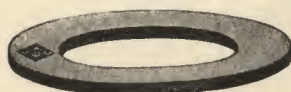
Note.—No. 1111 can be used for $\frac{1}{4}$ in. or $\frac{1}{2}$ in. Slip Nuts on Tubing Traps.



Woodward Wanger Co.



Washers and Packing



No. 1158

Basin Washers—Rubber

Thickness $\frac{1}{8}$ in.

No.	Size	
	Inside Diameter	Outside Diameter
1158.....	$1\frac{1}{4}$ in.	$2\frac{1}{8}$ in.



No. 1162

Clean Out Plug Washer

Grey Fiber
 $1\frac{1}{16}$ " O.D. x $7/16$ " I.D.



Corporation Cock Washers

Leather

No. 1159	for $\frac{1}{2}$ " Cock
No. 1160	for $\frac{5}{8}$ " Cock
No. 1161	for $\frac{3}{4}$ " Cock



No. 1164

Shank Washers for Sink Strainers

Packed 50 per Carton

For Use with "W-W" Sink Strainers

No.	Size		Thickness	Made from
	Inside Diameter	Outside Diameter		
1164.....	$1\frac{1}{8}$ in.	$2\frac{1}{8}$ in.	$\frac{1}{8}$ in.	Leather



Nos. 1166—1167 $\frac{1}{2}$

Coupling Washers for Sink Strainers

Packed 50 per Carton

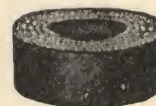
For Use with "W-W" Sink Strainers Nos. 4319 and 4320

No.	Size		Thickness	
	Inside Diameter	Outside Diameter		
1166.....	$1\frac{1}{8}$ in.	$1\frac{3}{8}$ in.	$\frac{3}{8}$ in.	Cloth Inserted
1167.....	$1\frac{1}{8}$ in.	$1\frac{3}{8}$ in.	$\frac{3}{8}$ in.	Leather
1167 $\frac{1}{2}$..	$1\frac{1}{8}$ in.	$1\frac{3}{8}$ in.	$\frac{3}{8}$ in.	Fiber

C. I. Stem Packing (Graphite and Asbestos) Split

No.	Outside Diameter	Hole	Height
1168-S	$\frac{5}{8}$ "	$\frac{3}{8}$ "	$\frac{3}{8}$ "
1168-M	$\frac{1}{2}$ "	$\frac{3}{8}$ "	$\frac{1}{2}$ "

Either of these packings will shape themselves to fit the cap in which they are placed.



No. 1168



No. 1173

Split Felt Ballcock Plunger Washer

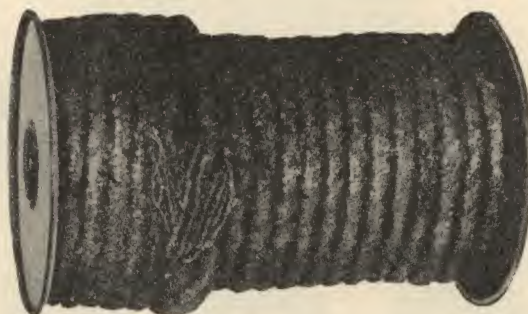
No. 1173 $\frac{3}{4}$ " O. D. ... $\frac{3}{8}$ " I. D. ... $\frac{1}{8}$ " Thick



Woodward Wanger Co.



Asbestos Wick Packing



Twisted Valve Stem Packing

Graphite and Asbestos

No.					
1169	 $\frac{3}{16}$"	.....	68 ft.	.....	1 lb.
1170	 $\frac{3}{16}$"	.....	17 ft.	.....	$\frac{1}{4}$ lb.
1171	 $\frac{1}{8}$"	.....	110 ft.	.....	1 lb.
1172	 $\frac{1}{8}$"	.....	28 ft.	.....	$\frac{1}{4}$ lb.
1172 $\frac{1}{2}$	 $\frac{1}{16}$"	.....	50 ft.	.....	$\frac{1}{4}$ lb.

Fuller Eccentric Washers



Nos. 1174-1175



No. 1176

Fuller Eccentric Washers—Felt

Packed 100 per Carton

No.	Outside Diameter	Height	Hole
1174	 $\frac{5}{8}$ in.	$\frac{3}{8}$ in.	$\frac{1}{4}$ in.
1175	 $\frac{5}{8}$ in.	$\frac{1}{8}$ in.	$\frac{3}{8}$ in.

Fuller Eccentric Washers—Lead

Packed 100 per Carton

No.	Outside Diameter	Hole	Thickness
1176	 $\frac{5}{8}$ in.	$\frac{3}{8}$ in.	$\frac{3}{64}$ in.

Fuller Eccentric Washers

Complete Sets

1177.....Set of two Lead and one Felt Washer
No. 1174

1178.....Set of two Lead and one Felt Washer
No. 1175



Woodward Wanger Co.



Graphite-Asbestos Split Washers and Packing



1183—Dome Shape, $\frac{3}{8}$ " x $\frac{7}{8}$ " x $\frac{3}{8}$ "

1192—Dome Shape, $\frac{1}{8}$ " O.D. x $\frac{1}{2}$ " I.D. x $\frac{2}{3}$ " Deep

1187—Dome Shape, $\frac{3}{4}$ " O.D. x $\frac{1}{8}$ " I.D. x $\frac{3}{8}$ " Deep

1184—Dome Shape, $\frac{1}{8}$ " O.D. x $\frac{1}{2}$ " I.D. x $\frac{5}{8}$ " Deep

1194—Dome Shape, $\frac{3}{8}$ " O.D. x $\frac{1}{2}$ " I.D. x $\frac{1}{8}$ " Deep

1197—Dome Shape, $\frac{1}{4}$ " O.D. x $\frac{1}{8}$ " I.D. x $\frac{1}{4}$ " Deep

1183-S—Dome Shape, $\frac{1}{8}$ " x $\frac{3}{4}$ " x $\frac{3}{8}$ "

1191— $\frac{9}{16}$ " O.D. x $\frac{3}{8}$ " I.D. x $\frac{1}{4}$ " Deep

1188— $\frac{3}{8}$ " O.D. x $\frac{1}{2}$ " I.D. x $\frac{1}{4}$ " Deep

1185— $\frac{3}{4}$ " O.D. x $\frac{7}{8}$ " I.D. x $\frac{1}{4}$ " Deep

1189— $\frac{1}{8}$ " O.D. x $\frac{3}{8}$ " I.D. x $\frac{5}{8}$ " Deep

1186— $\frac{5}{8}$ " O.D. x $\frac{1}{2}$ " I.D. x $\frac{1}{4}$ " Deep

1201— $\frac{1}{8}$ " O.D. x $\frac{1}{2}$ " I.D. x $\frac{1}{8}$ " Deep for W. W. Double Sink Faucet

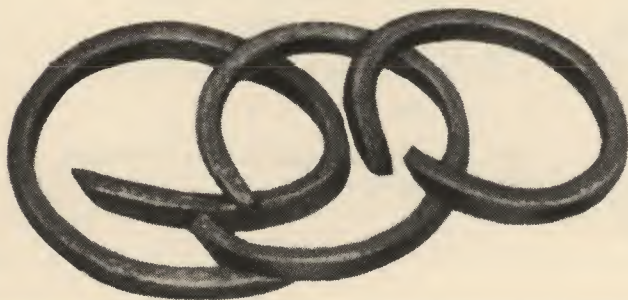
1195— $\frac{1}{8}$ " O.D. x $\frac{1}{2}$ " I.D. x $\frac{3}{8}$ " Deep

1193— $\frac{3}{8}$ " O.D. x $\frac{1}{2}$ " I.D. x $\frac{1}{4}$ " Deep—Cone Shape

1196— $\frac{3}{8}$ " O.D. x $\frac{1}{2}$ " I.D. x $\frac{7}{8}$ " Deep—Flat

1190— $\frac{3}{8}$ " O.D. x $\frac{7}{8}$ " I.D. x $\frac{1}{2}$ " Deep

Slip Joint Washers for Traps and Flush Elbows



No. 1198 - 1-9/16" O.D. x 1-1/4" I.D. x 5/32" Deep - Asbestos Washers Graphited

No. 1199 - 1-3/4" O.D. x 1-1/2" I.D. x 5/32" Deep - Asbestos Washers Graphited

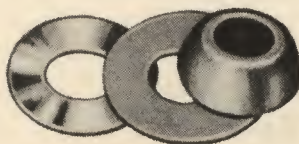
No. 1200 - 2-1/4" O.D. x 2" I.D. x 3/16" Deep - Asbestos Washers Graphited



Woodward Wanger Co



Stem Packing



BASIN

No. 1180-S—Set of three O. D. $\frac{3}{4}$ " Stem Packing for W-W No. 6664, No. 6655, No. 6656.

No. 1181-S—Brass Washer Only

No. 1182-S—Fiber Washer Only

No. 1183-S—Graphite Packing Only

BATH

No. 1180—Set of three O. D. $\frac{1}{8}$ " Stem Packing Set consists of one each, Brass Washer, Fiber Washer, and Graphite Packing.

No. 1181—Brass Washer Only

No. 1182—Fibre Washer Only

No. 1183—Graphite Packing Only



Graphite-Asbestos Washer Assortment

Contains 8 each of 1193 - 1194 - 1196 Slip Joint Packings, 4 each of 1185 - 1186 - 1188 - 1189 - 1190 - 1191 - 1195 Square Stem Packing for Faucets and Valves; 6 each of 1184 - 1187 - 1192 - 1197 Dome Bonnet Packings and 8 each of 1198 - 1199 - 1200 Slip Joint Washers for Traps.

Gas Heater Washers

Lawson Red Fiber Gas Heater Washers

Packed 100 per Carton

No.	Outside Diameter	Inside Diameter	Thickness
1204	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.



No. 1204

Humphrey Gas Heater Washers

RED FIBER

Packed 100 per Carton

No.	Outside Diameter	Inside Diameter
1209	1 in.	$\frac{3}{8}$ in.

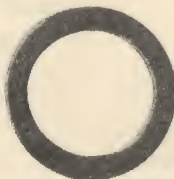


No. 1209

RED FIBER

1207—Rex Heater Washer, Graphited Both Sides.
 $1\frac{1}{2}$ " O. D., 1" I. D.

1208—Graphited Both Sides.
1" O. D., $\frac{3}{4}$ " I. D., $\frac{1}{16}$ " Thick



No. 1209

RED FIBER

1209—Humphrey Heater
1" O. D., $\frac{29}{32}$ " I. D. $\frac{1}{16}$ " Thick

1210— $1\frac{1}{8}$ " O. D., $\frac{3}{8}$ " I. D.,

1242—Rex Heater Washer
 $\frac{29}{32}$ " O. D., $\frac{11}{16}$ " I. D.



Woodward Wanger Co.



Miscellaneous Washers

W.W. Double Sink Faucet Coupling Washer

RED FIBER



No. 1211 $1\frac{1}{8}$ " O. D.
 $1\frac{1}{8}$ " I. D.
 $\frac{3}{4}$ " Thick

Sink Bolt Washers



Leather

No. 1214 Kind
Leather

Water Meter Coupling Washer

Leather



No. 1212 O. D. I. D. Thick
 $\frac{7}{8}$ " $\frac{9}{16}$ " $\frac{1}{8}$ "

Fiber

No. 1212 $\frac{1}{2}$ $1\frac{7}{16}$ " O. D., $1\frac{1}{16}$ " I. D.

"Republic" Washer



Fiber

No. 1216— $27/32$ " O.D., $17/32$ " I.D.
and $9/64$ " Thick

Hose Washers



RUBBER

Round and Oval

No. 1220 (Round) $\frac{1}{2}$ "

No. 1220 $\frac{1}{2}$ (Oval) $\frac{1}{2}$ "



LEATHER

No. 1225 $\frac{1}{2}$ "

Packed 100 to the carton.

Union Washers

Flexo Boiler Union Washers

Made from Cotton Fiber



No.	O. D.	I. D.	Thick.
1230	$1\frac{5}{8}$ "	$1\frac{1}{8}$ "	$\frac{3}{4}$ "
1231	$1\frac{3}{8}$ "	$\frac{7}{8}$ "	$\frac{3}{4}$ "
1232	$1\frac{1}{4}$ "	$\frac{7}{8}$ "	$\frac{3}{4}$ "



Woodward Wanger Co.



Union Washers



Nos. 1235-1236

Fuller Faucet Union Washers—

Red Fiber

Packed 100 per Carton

No.	Outside Diameter	Inside Diameter	Thickness
1235	1 $\frac{1}{8}$ in.	$\frac{7}{8}$ in.	$\frac{1}{8}$ in.
1236	1 $\frac{3}{8}$ in.	$\frac{7}{8}$ in.	$\frac{1}{8}$ in.

Soldering Union Washers

Red Fiber

Packed 100 per Carton



Nos. 1240-1243

No.	O. D.	I. D.	Fits I. P. Nut
1240	$\frac{3}{4}$ "	$\frac{3}{8}$ "	$\frac{3}{8}$ "
1241	$\frac{3}{8}$ "	$\frac{7}{16}$ "	$\frac{1}{2}$ "
*1242	$\frac{3}{8}$ "	$\frac{1}{16}$ "	$\frac{3}{4}$ "
1243	1 $\frac{3}{8}$ "	$\frac{7}{8}$ "	1"

*Also used as a Rex Heater Washer.

Trap Washers

Red Fiber Trap Washers

For Use with Bent Tube Traps

No.	Size of Trap	Outside Diameter	Inside Diameter	Thickness
1246	1 $\frac{1}{4}$ in.	1 $\frac{1}{2}$ in.	1 $\frac{3}{8}$ in.	$\frac{1}{8}$ in.
1247	1 $\frac{1}{2}$ in.	1 $\frac{3}{4}$ in.	1 $\frac{1}{2}$ in.	$\frac{1}{8}$ in.



Nos. 1246-1247

Leather Trap Washers

For Use with Bent Tube Traps

No.	Size of Trap	Outside Diameter	Inside Diameter	Thickness
1248	1 $\frac{1}{4}$ in.	1 $\frac{1}{2}$ in.	1 $\frac{3}{8}$ in.	$\frac{1}{8}$ in.
1249	1 $\frac{1}{2}$ in.	1 $\frac{3}{4}$ in.	1 $\frac{1}{2}$ in.	$\frac{1}{8}$ in.



Nos. 1248-1249



Woodward Wanger Co.



Float Valve (Ball Cock) Washers

MOTT AND OTHERS

— Leather —



No. 1298-A-B

No.	O.D.	THICK.
No. 1298	$\frac{5}{8}$ "	$\frac{1}{8}$ "
No. 1298-A	$\frac{1}{2}$ "	$\frac{1}{8}$ "
No. 1298-B	$\frac{1}{8}$ "	$\frac{1}{8}$ "

PARAGON

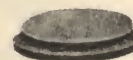


No. 1299

Rubber

Diameter	$\frac{3}{8}$ x $\frac{1}{2}$ in.
Thickness	$\frac{1}{8}$ in.

TRY-ME



No. 1299½

Rubber

Top Diameter	$\frac{3}{8}$ "
Bottom Diameter	$\frac{5}{8}$ "
Thickness	$\frac{1}{8}$ "

BOSTON BALLCOCK



No.	
1300-A	$\frac{3}{8}$ in. O.D.
	$\frac{1}{8}$ " hole, $\frac{1}{8}$ " thick.

DOUGLASS B. B.



No. 1300

Leather

Diameter	$\frac{5}{8}$ in.
Hole	$\frac{3}{8}$ in.
Thickness	$\frac{1}{8}$ in.

PITTSBURGH



No. 1301

Rubber

Diameter	$\frac{1}{8}$ in.
Hole	$\frac{1}{8}$ in.
Thickness	$\frac{3}{8}$ in.

SPECIAL



Nos. 1302-1303

Rubber

No.	O.D.	Hole	Thick.
1302	$\frac{1}{2}$ "	$\frac{1}{8}$ "	$\frac{1}{8}$ "
1303	$\frac{3}{8}$ "	$\frac{1}{8}$ "	$\frac{1}{8}$ "

STANDARD



Rubber

No.	O. D.	Hole	Thick.
1308	$\frac{3}{8}$ "	$\frac{1}{8}$ "	$\frac{1}{8}$ "
1309	$\frac{3}{8}$ "	$\frac{1}{8}$ "	$\frac{3}{8}$ "

SPECIAL



No. 1304

Rubber

Diameter	$\frac{5}{8}$ in.
Hole	$\frac{3}{8}$ in.
Thickness	$\frac{1}{8}$ in.

WOLFF



No. 1307

Felt

Diameter	$\frac{1}{8}$ in.
Hole	$\frac{1}{8}$ in.
Thickness	$\frac{3}{8}$ in.

ROSS



No. 1313

Rubber

Diameter	$\frac{3}{8}$ in.
Thickness	$\frac{1}{8}$ in.

CURTAIN VALVE



No. 1314

Leather

Diameter	$\frac{5}{8}$ in.
Thickness	$\frac{1}{8}$ in.



Woodward Wanger Co.



Ballcock Washer Assortment



100 Rubber Washers

No. 1285

Assortment consists of 10 each of the following:—
Nos. 1290, 1291, 1292, 1293, 1293½, 1294, 1295,
1297, 1298, 1299.

100 Leather Washers

No. 1298-C

Assortment consists of 25 each of the following:—
Nos. 1292-L, 1298, 1298-A, 1298-B.

Float Valve (Ball Cock) Washers

T/N BALL COCK



No. 1288

Diameter 1½ in.
Thickness ¾ in.

W-W COMPOUND LEVER

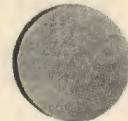


No. 1289

Rubber

Diameter 5/8 in.
Thickness 1/8 in.

McSHANE



No. 1290

Rubber

Diameter 1½ in.
Thickness 1/8 in.

W-W BALLCOCKS



Little Samson
• Kwyet
• Beaver

No. 1291

Rubber

Diameter 1/2 in.
Thickness 1/8 in.

DOUGLAS



Rubber

No.	Dia.	Thickness
1292	3/8"	1/8"
1292-A	5/8"	3/4"

DOUGLASS



No. 1292-L

Leather

Diameter 9/16 in.
Thickness 1/8 in.

STANDARD MOTT - MADDOCK



Rubber

No.	Dia.	Thick.
1293	5/8"	1/8"
1293½	5/8"	3/2"

SUCCESS WOLFF



No. 1294

Rubber

Diameter 1½ in.
Thickness 1/8 in.

DALE



No. 1295

Rubber

Diameter 1½ in.
Thickness 3/2 in.



Woodward Wanger Co.



Float Valve (Ball Cock) Washers

Curtain Flush Valve Washer



Leather

No. 1315—Diameter $2\frac{3}{8}$ "
with $\frac{3}{8}$ " hole, $\frac{3}{16}$ " thick

Flat Plunger Washer



No. 1332..... Size 4 in.

To be used on end of pipe for plunging out drains.

Small Red Fiber Washers
For use in Waste Caps of Compression
Stops and Wastes



No. 1331 Size (O. D.) $\frac{3}{8}$ in.

Leather Float Valve (Ball Cock) Cups



	Outside Diameter	Hole	Height	Thick
1341.....Leather Cup for Douglass Ballcock.....	$\frac{11}{16}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1342.....	$\frac{1}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1343.....	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{3}{4}$ in.
1344.....	$\frac{7}{8}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1345.....	$\frac{1}{2}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1346.....	$\frac{1}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{3}{4}$ in.
1347.....	$\frac{5}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{3}{4}$ in.
1349.....	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.
1351.....	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.
1353.....	1 in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1354.....	$1\frac{1}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1356.....	$1\frac{1}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.

(No. 1349 for Mott Self-Closing Work)

Note.—No. 1345 is for use with Syvento, Mansfield and Pittsburgh Float Valves (Ball Cocks).



Woodward Wanger Co.



Small Leather Cup Assortment

INCLUDES ALL IMPORTANT SIZES AND WILL TAKE CARE OF ALL
ORDINARY REQUIREMENTS



No. 1357

THIS BOX CONTAINS 60 CUPS—SIX DIFFERENT SIZES

No. 1357 60 Cups—Assorted

Motor and Air Pump Cups



HIGH GRADE OILED LEATHER

No.	Diameter
1358.....	$\frac{3}{4}$ in.
1359.....	1 in.
1360.....	$1\frac{1}{4}$ in.
1361.....	$1\frac{1}{2}$ in.
1362.....	$1\frac{3}{4}$ in.
1363.....	2 in.



Woodward Wanger Co.



Leather Pump Cups



OAK TANNED

2½" for No. 1 Pump
3" for No. 2 Pump
3½" for No. 3 Pump



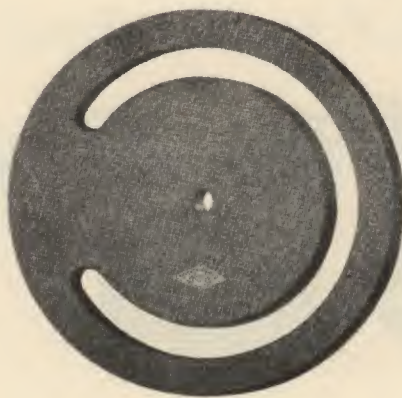
OPEN BOTTOM

Number	1370	1372	1374	1376	1378	1379	1380	1382
Size	1¼"	1½"	1¾"	2"	2½"	2¾"	3"	3½"
Hole Size	¾"	¾"	1⅛"	1¼"	1⅝"	1¾"	2"	2¼"

CLOSED BOTTOM

Number	SH-1371	SH-1372	SH-1374	SH-1376	SH-1378	SH-1379	SH-1380	SH-1382
Size	1⅝"	1½"	1¾"	2"	2½"	2¾"	3"	3½"

Pump Leathers



Pump Valve Leathers—Lower



Pump Plunger Leathers—Upper

OIL TANNED

No.	For Pump No.	Outside Diameter
1406.....	1	3 in.
1407.....		3¼ in.
1408.....	2	3½ in.
1410.....	3	4 in.

OIL TANNED

No.	For Pump No.	Outside Diameter	Inside Diameter
1439....	1	3 in.	1½ in.
1441....	2	3½ in.	1¾ in.



Woodward Wanger Co.



Pump Leathers



Pump Valve Leathers—Lower



Pump Plunger Leathers—Upper

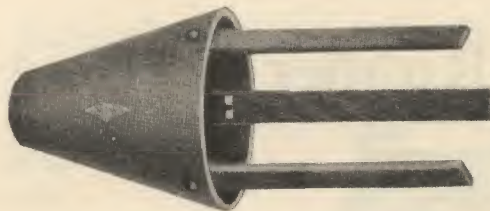
OAK TANNED

No.	For Pump No.	Outside Diameter
1421.....	1	3 in.
1422.....		3¼ in.
1423.....	2	3½ in.
1425.....	3	4 in.

OAK TANNED

No.	For Pump No.	Outside Diameter	Inside Diameter
1452....	1	3 in.	1½ in.
1454....	2	3½ in.	1¾ in.

Boat Pump Plungers



Boat Pump Plungers
LEATHER

Packed 12 per Carton

No.	Size
1468.....	2 in.
1469.....	2½ in.
1470.....	3 in.
1471.....	3½ in.
1472.....	4 in.



Woodward Wanger Co.



Vogel Repairs

Vogel Closet Repair Set



No. 1511-V

Set of four, one Hopper Valve Washer, one $\frac{1}{2}$ " Special Fuller Ball and two Fibre Washers.

Vogel Packing



No. 1511-H

Vogel Hopper Valve Washer
O. D. $1\frac{1}{4}$ ", Hole $\frac{1}{2}$ "

Hydrant Washers

Murdock



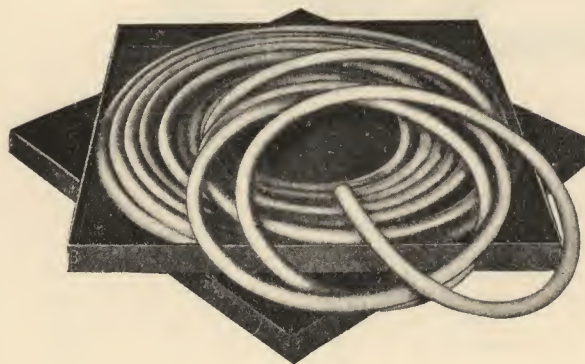
1519 ($\frac{3}{4}$ in.) Murdock
1520 (1 in.) Murdock

Total Eclipse



No.
1533 ($\frac{3}{4}$ in.) Total Eclipse

Rubber Tubing



White Rubber—

Packed in Boxes of 50 Feet Each

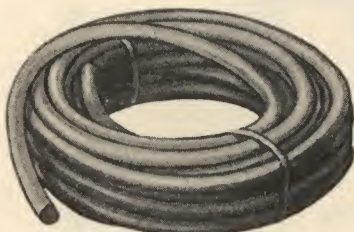
No.	Diameter	Wall	Weight
1547	$\frac{3}{8}$ in.	$\frac{5}{64}$ in.	Medium
1549	$\frac{1}{2}$ in.	$\frac{9}{64}$ in.	Medium
1553	$\frac{3}{8}$ in.	$\frac{9}{64}$ in.	Heavy
1555	$\frac{1}{2}$ in.	$\frac{8}{64}$ in.	Heavy



Woodward Wanger Co.



Red Cloth Inserted Tubing



Beer and Air Hose

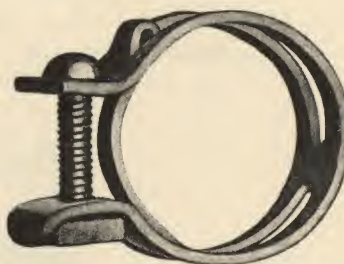
White rubber inside, red rubber outside.

No. 1576	$\frac{3}{8}$ "	3 Ply Beverage Hose
No. 1578	$\frac{1}{2}$ "	3 Ply Beverage Hose
No. 1579	$\frac{1}{2}$ "	5 Ply Beverage Hose

Nickel Plated Clamp

FOR RUBBER TUBING

No.
1580....For $\frac{3}{8}$ " Tubing.....Nickel-plated
1581....For $\frac{1}{2}$ " Tubing.....Nickel-plated



Rubber Tubing

PURE GUM TUBING

For Furnace Bulbs

This tubing is hand made of the finest rubber, very soft and pliable;

This tubing is not corrugated.

1585.....Pure Gum Tubing

Ballcock Coupling Nut Washers



3113-S.....Beveled $1\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{3}{8}$ "



1587.....Plain $\frac{7}{8}$ " x $1\frac{5}{8}$ "

Washers Used on Supply Valves

Cloth Inserted

No. 1589

$\frac{1}{2}$ " x $\frac{1}{8}$ "



Rubber

No. 1590

$\frac{1}{2}$ " x $\frac{7}{8}$ "



Woodward Wanger Co.



Washers Used on Supply Valves



1592



1594

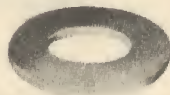


1595

THE ABOVE ARE ALL LEATHER

Number	1592	1593	1594	1595
Size	$\frac{7}{8}$ " x $\frac{3}{4}$ "	$\frac{1}{2}$ " x $\frac{1}{8}$ "	$\frac{1}{2}$ " x $\frac{7}{8}$ "	$\frac{3}{4}$ " x $\frac{1}{8}$ "

Ballcock Shank Washers



Cloth Inserted

No. 1596.... $\frac{3}{4}$ " O.D. x $\frac{1}{8}$ " I.D.
x $\frac{1}{8}$ " Thick



White Fiber

No. 1597.... $\frac{1}{8}$ " O.D. x $\frac{1}{2}$ " I.D.
x $\frac{1}{8}$ " Thick

Split Leather Plunger Washers

For Supply Valves—all actual size
all $\frac{1}{8}$ " Thick



Split Leather
No. 1599... $\frac{1}{8}$ " x $\frac{3}{8}$ " hole



Split Leather
No. 1600... $\frac{3}{4}$ " x $\frac{3}{8}$ " hole



Split Leather
No. 1601... $\frac{3}{4}$ " x $\frac{1}{2}$ " hole



Split Leather
No. 1593... $\frac{1}{8}$ " x $\frac{3}{8}$ " hole



Split Leather
No. 3109... $\frac{1}{8}$ " x $\frac{1}{8}$ " hole



Woodward Wanger Co.



High and Low Pressure Steam Packing



Compressed Asbestos Sheet Packing

Made from Canadian Asbestos fibre, blended with superheat resisting compounds. It is bonded under tremendous pressure, resulting in a pliable sheet with high tensile strength. Recommended for use against superheated or saturated steam, air, gas, ammonia and most chemical solutions.

No.	Size	Thickness
1626	50" x 50"	$\frac{3}{16}$ "
1627	50" x 50"	$\frac{1}{8}$ "
1628	50" x 50"	$\frac{1}{16}$ "

Sold in full sheets only.

Braided or Twisted Packing



Self Lubricating—Made from long fibre asbestos yarn, thoroughly lubricated with a heat resisting compound and graphite. Furnished braided or twisted. For use on stems of globe and angle valves operating against high pressure steam.

Twisted			Braided		
	No. 1629	No. 1630		No. 1635	No. 1636
$\frac{1}{8}$ "	 1 lb.	 2 lb.	$\frac{1}{8}$ "	 1 lb.	 2 lb.
	No. 1631	No. 1632		No. 1637	No. 1638
$\frac{1}{4}$ "	 1 lb.	 2 lb.	$\frac{1}{4}$ "	 1 lb.	 2 lb.
	No. 1633	No. 1634		No. 1639	No. 1640
$\frac{3}{8}$ "	 1 lb.	 2 lb.	$\frac{3}{8}$ "	 1 lb.	 2 lb.

Pump Packing



Made from long fibre Asbestos, braided square by the same method used in producing flax packing. Given a lubrication and graphite treatment which is impregnated into each strand of material. A high grade Centrifugal or Rotary Pump packing.

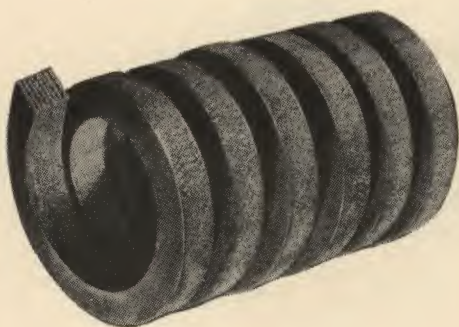
No.	Size	Length
1641	... $\frac{1}{4}$ "	... 115 ft.
1642	... $\frac{3}{8}$ "	... 108 ft.
1643	... $\frac{1}{2}$ "	... 63 ft.
1644	... $\frac{5}{8}$ "	... 44 $\frac{1}{4}$ ft.



Woodward Wanger Co.



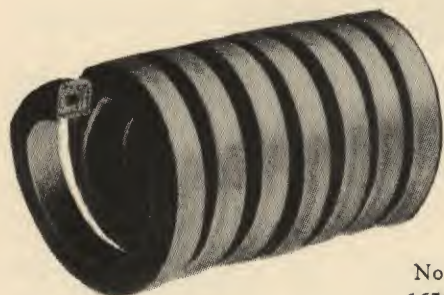
Low Pressure Packing



Constructed of diagonal plies of closely woven duck, frictioned with a specially compounded rubber. Unusual expansive quality. Recommended for use against medium pressure steam, hot water and ammonia, particularly on rods or plungers out of line or subject to a lateral motion.

No.		No.	
1645	 1/4"	1648	 5/8"
1646	 3/8"	1649	 3/4"
1647	 1/2"	1650	 1"

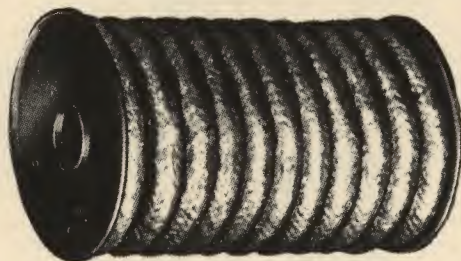
"Z" Spiral Packing



Constructed of diagonal plies of closely woven duck, frictioned with a specially compounded rubber. Unusual expansive quality. Recommended for use against medium pressure steam, hot water and ammonia, particularly on rods or plungers out of line or subject to a lateral motion.

No.		No.	
1651	 1/4"	1654	 5/8"
1652	 3/8"	1655	 3/4"
1653	 1/2"	1656	 1"

Asbestos Wick Packing



No.			
1169	 3/8"	68 ft.	 1 lb.
1170	 1/2"	17 ft.	 1/4 lb.
1171	 1/8"	110 ft.	 1 lb.
1172	 1/8"	28 ft.	 1/4 lb.
1172 1/2	 1/8"	50 ft.	 1/4 lb.

Asbestos Wicking



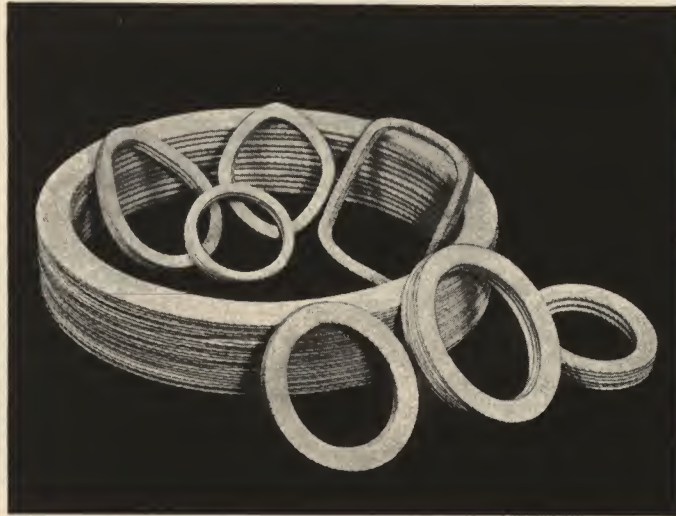
No.	Weight
4724	 1/4 lb.



Woodward Wanger Co.



Manhole and Handhole Asbestos Gaskets



Orders Must Specify Both Dimensions, Length and Width, Face and Thickness

Immediate Shipment

Stock Sizes

1 1/4" Flange x 1/4" Thick

No.	Manhole Oval
1660	12" x 16" I. D.
1661	11 1/2" x 16 1/2" I. D.
1662	11" x 16" I. D.
1663	10" x 16" I. D.
1664	10" x 15 1/2" I. D.
1665	11" x 15" I. D.
1666	10 1/2" x 15 1/2" I. D.
1667	10 1/2" x 15" I. D.
1668	10" x 15" I. D.
1669	10" x 14 1/2" I. D.
1670	10" x 14" I. D.

These Asbestos Gaskets are constructed of a lightly woven semi-bronze wire inserted asbestos cloth treated with a thin coat of high heat and moisture resisting compound.

1" Flange x 1/4" Thick

No.	Manhole Oval
1671	11" x 15" I. D.
1672	10 1/2" x 15 1/2" I. D.

Handhole Gaskets

Handhole Oval 5/8" Flange x 1/4" Thick

No.	Size
1675	3" x 5"
1676	3 1/2" x 5 1/2"
1677	3 1/2" x 4 1/2"
1678	4" x 5"
1679	4" x 6"
1680	4 1/2" x 5 1/2"

Handhole Oval 1/2" Flange x 1/4" Thick

No.	Size
1681	2 1/2" x 3"
1682	2 1/2" x 4 1/2"
1683	3" x 4"
1684	3" x 5"
1685	3 1/2" x 4 1/2"



Woodward Wanger Co.



Plumbers' Friends



No. 1611

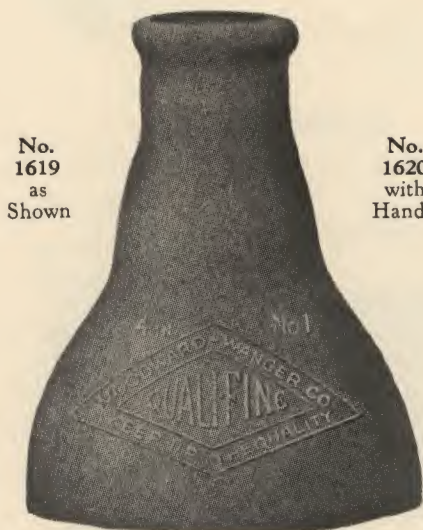
No. 1611—With 24" handle—5" wide, with extra wide $\frac{1}{2}$ " lip.



Super Force Cup
No. 1605

For Toilet Bowls. The most powerful Force Cup made. Every shop should have one.

No. 1605—With Handle



No.
1619
as
Shown

No.
1620
with
Handle

No. 1619—4" reinforced cup, 5" high, with clamp, but no handle.

No. 1620—Same with 24" handle.

Heavy 6" Cup, with Wide Lip



No. 1623—Heavy duty cup, for plumber's use, 6" wide, extra wide $\frac{3}{4}$ " lip for gripping. With clamp but no handle.

No. 1624—Same with 24" handle.



Woodward Wanger Co.

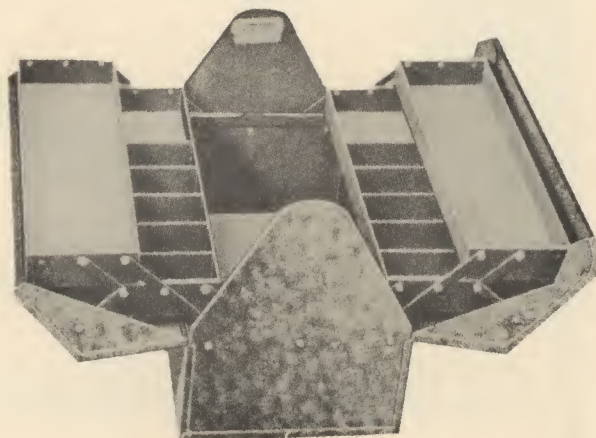


Plumber's Kit

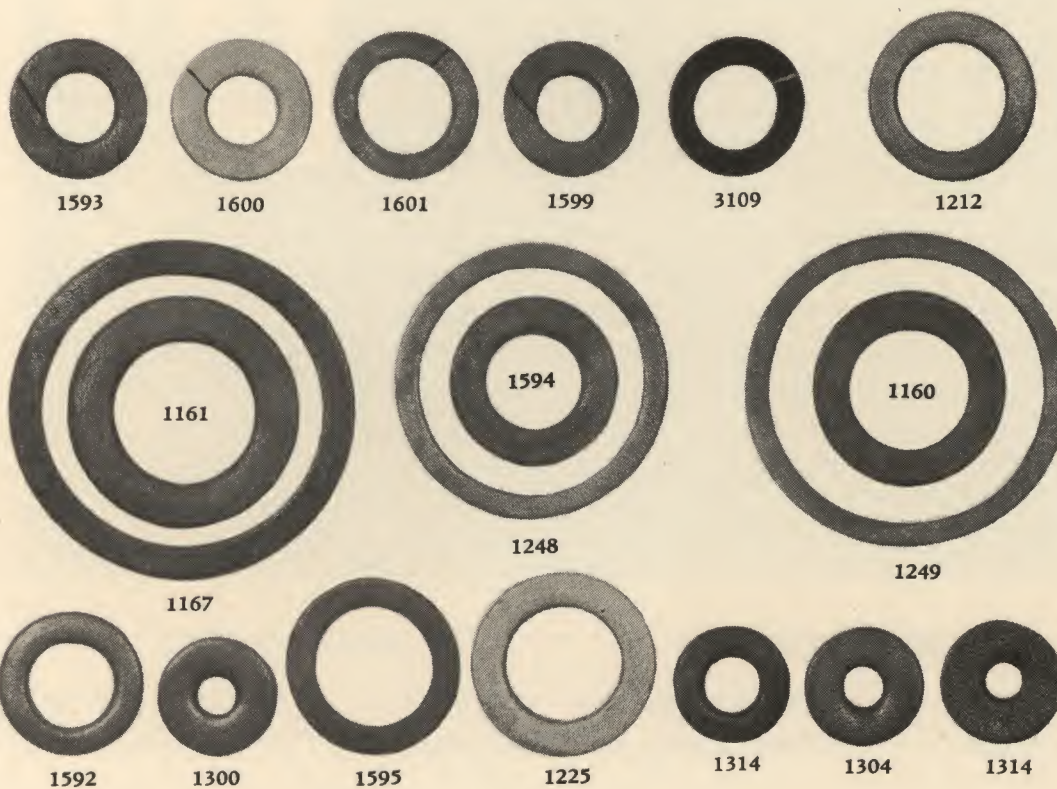
No. 1999-E

Plumber's Kit—Small Size

Empty—17" x 8" x 10". Pine Cone
Outside finish. Green Enameled Inside
finish.



Leather Washers



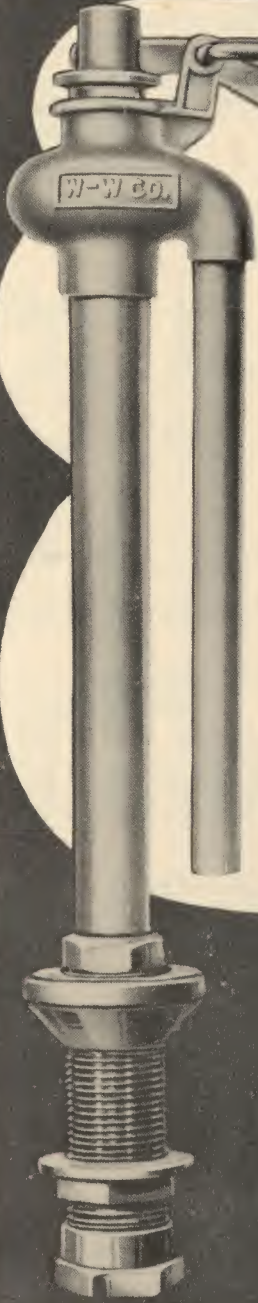


Woodward Wanger Co.





Woodward Wanger Co.



New!
Improvements in
**THE WOODWARD-WANGER
BALLCOCK**

Special degreasing process makes valve actually sparkle, it is so clean and bright.

Standpipe now made from $\frac{3}{4}$ " bar stock, solid brass, which eliminates such things as sand holes or weak, thin walls. Larger waterway through standpipe decreases pressure, makes valve quieter and minimizes clogging by corrosion or lime deposit. Every valve tested under 100 lb. water pressure to be sure it's right.

SHORT SHANK

No. 3037-C—($1\frac{1}{4}$ ") China Seat

No. 3037-B—($1\frac{1}{4}$ ") Brass Seat

LONG SHANK

No. 3042-C—($2\frac{3}{4}$ ") China Seat

No. 3042-B—($2\frac{3}{4}$ ") Brass Seat

EACH BALLCOCK SEPARATELY BOXED



Woodward Wanger Co.



PARTS FOR W-W COMPOUND LEVER BALLCOCK



No. 3106
Stand Pipe



No. 3107-W
Hush Tube



No. 3264
Seat Cap



No. 1293
Rubber
Ballcock
Washer



No. 3102-L
Oil Treated
Washer



No. 3102
China Seat



No. 3102-T
Cloth Inserted
Washer



No. 3104
Brass
Plunger



No. 3109
Split Leather
Washer

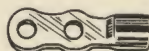


No. 3193 $\frac{7}{16}$ " x $1\frac{9}{24}$ " used to hold Lever Links.

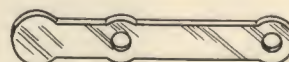
No. 3194 $\frac{1}{2}$ " x $1\frac{9}{24}$ " used on end of 3114 to hold Float Socket.



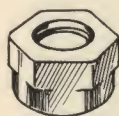
No. 3189
"L" shaped screw. Removing
this screw will permit valve
to be taken down for repairs.



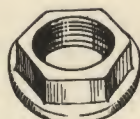
No. 3114
Float Rod
Socket



No. 3115 Long Plunger Lever.



No. 3110
Coupling Nut



No. 3108
Lock Nut



No. 3113-S
Shank Washer



No. 3116
Two Lever Links, same in size only
One is threaded.



No. 3116-T



No. 3105-S
Short Shank

No. 3105-L
Long Shank

- No. 1293 Rubber Ballcock washer
- No. 3102 China Seat for W-W Compound Lever Ballcock
- No. 3102-T Cloth inserted washer that slides over and fits on shoulder of China Seat
- No. 3102-L Oil-treated washer that fits under the China Seat (between stand pipe and china)
- No. 3104 Brass Plunger for W-W Compound Lever Ballcock
- No. 3105-S Short shank
- No. 3105-L Long shank
- No. 3106 Stand Pipe
- No. 3107-W Hush Tube

- No. 3108 Lock Nut
- No. 3109 Split leather washer for Plunger, oil treated
- No. 3110 Coupling Nut
- No. 3113-S Beveled shank washer
- No. 3115 Lever Link—not threaded
- No. 3116 Lever Link—threaded
- No. 3116-T Long Lever Link
- No. 3189 "L" shaped screw. Ballcock can be taken down for repairs by removing this screw.
- No. 3193 $\frac{7}{16}$ " x $1\frac{9}{24}$ " used to hold Lever Links
- No. 3194 $\frac{1}{2}$ " x $1\frac{9}{24}$ " used on end of 3114 to hold Float Socket



Woodward Wanger Co.



Ball Cock Parts



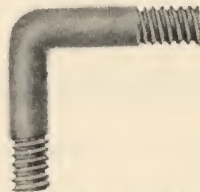
Bronze Head

No. 3189 .. $\frac{3}{4}$ " .. 10-24



Bronze Link Screw

No. 3193 $\frac{7}{16}$ " 10-24
No. 3194 $\frac{1}{2}$ " 10-24
No. 3195 $\frac{5}{8}$ " 10-24



Bronze Head

No. 3190 .. $\frac{3}{4}$ " .. 10-24
No. 3191 .. $\frac{3}{4}$ " .. 11-24

Float Rod Connections

For Standard and Oversize Floats and Rods



No. 3204



No. 3205

No.	Tapped Inside	Threaded Outside
3204.....	$\frac{3}{8}$ in.	$\frac{1}{4}$ in.
3205.....	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.



Bronze Refill Plug

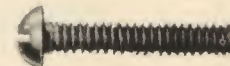
No. 3228 $\frac{1}{4}$ "
No. 3229 $\frac{5}{16}$ "



No. 3120
Cast Eye Thumb Screw
 $1\frac{1}{8}$ "—10-24



No. 3182
Brass Thumb Screw
for McShane Ball Cock
10-24



No. 3192
Adjusting Screw
Bronze $\frac{7}{8}$ " $\frac{1}{4}$ -20
for Wolverine Ballcocks

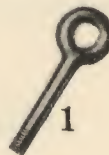
Parts For Mansfield Float Valve (Ball Cock)



3171



3172



1



12



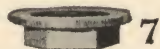
17



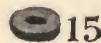
16



2



7



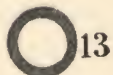
15



9



6



13



8



10

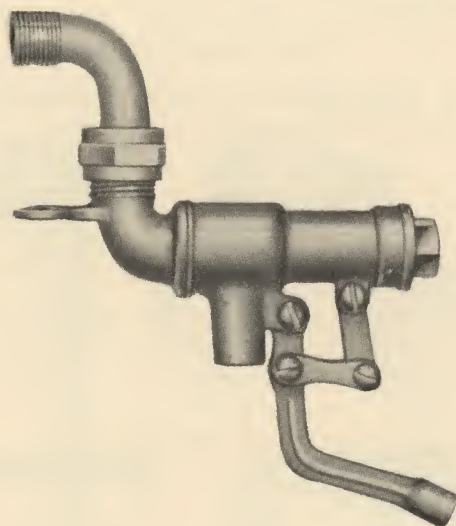
- 3155 Shank, Large.
- 3156 Drilled Screw for use with either Cup or Seat Washer. Fig. 6.
- 3157 Rough Lock Nut, Regular. Fig. 7.
- 3158 Top Plunger Cap. Fig. 8.
- 3159 N. P. Coupling Nut, Regular. Fig. 9.
- 3160 Gland. Fig. 10.
- 3161 Brass Washer for Shank (Not Illustrated).
- 3162 Flat Leather Washer for Top Plunger Cap. Fig. 13.
- 3163 Leather Washer for Coupling Nut (Not Illustrated).
- 3164 Thumb Screw, for Horizontal Lever (Not Illustrated).
- 3165 Thumb Screw, for Upright Lever (Not Illustrated).
- 3166 Flat Rubber Shank Washer. Fig. 12.
- 1305 Flat Rubber Seat Washer. Fig. 15.
- 1345 Leather Cup Washer. Fig. 16.
- 3110 Flanged Rubber Washer for Shank (Not Illustrated).
- 3125 Brass Ring for Drilled Screw in Cup or Seat Washer. Fig. 17.
- 3150 Lever Screw. Fig. 1.
- 3151 Plunger, Less Gland. Fig. 2.



Woodward Wanger Co.



High Tank Top Supply Ball Cock



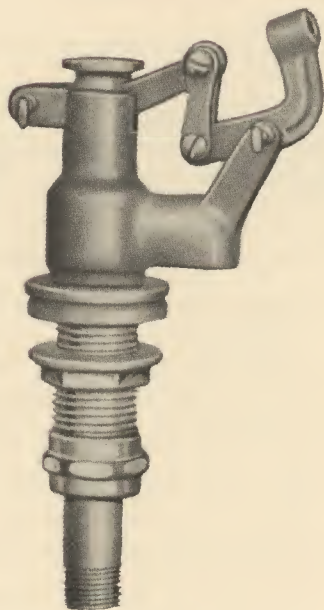
Catalog Number and Description

NO. 3045. This Ball Cock is designed for use in a high tank, with top supply. By the use of the wing elbow, the ball cock is entirely in the tank. Plunger is fully encased in the body to prevent leakage. Tapped $\frac{1}{4}$ -20 for float rod. The wing elbow is threaded $\frac{1}{2}$ " I. P. S., and is swiveled in the coupling nut to the wing elbow. The tail piece is threaded $\frac{3}{8}$ " I. P. S.

High Tank Top Supply Ball Cock

(not illustrated)

No. 3045 $\frac{1}{2}$ Same as above, but with a straight wing connection. This brings the tail elbow outside of the tank.



High Tank Bottom Supply Ball Cock

Catalog Number and Description

NO. 3085. This Ball Cock is designed for use in a high tank having a bottom supply. A special composition seat washer is held in place by a cadmium plated retaining cap. A cast $\frac{3}{8}$ " I. P. S. tail piece is regularly furnished. Lock nut, coupling nut and tail piece are highly polished and nickel plated.



Woodward Wanger Co.



Top and Bottom Wires

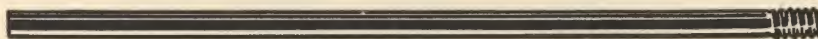
Float Rods



No. 3200 8" Long..... $\frac{1}{4}$ " Dia.....Threaded $\frac{3}{4}$ " one end, 3" other end
 No. 3200-B 10" Long..... $\frac{1}{4}$ " Dia.....Threaded $\frac{3}{4}$ " one end, 3" other end
 No. 3201 12" Long..... $\frac{1}{4}$ " Dia.....Threaded $\frac{3}{4}$ " one end, 3" other end

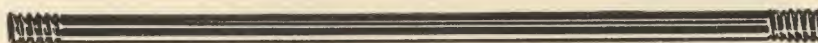
Refill Tubes

Copper Threaded One End



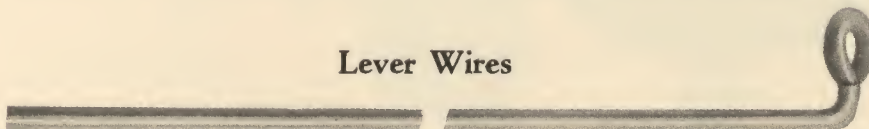
			Threaded
No. 3210	$\frac{1}{4}$ "	10" Long	$\frac{1}{4}$ —40
No. 3211	$\frac{1}{4}$ "	12" Long	$\frac{1}{4}$ —40
No. 3212	$\frac{1}{4}$ "	16" Long	$\frac{1}{4}$ —40
No. 3213	$\frac{5}{16}$ "	18" Long	$\frac{5}{16}$ —32

Threaded Both Ends



No. 3210-T	10" Long	$\frac{1}{4}$ —40 and $\frac{1}{4}$ —32
No. 3211-T	12" Long	$\frac{1}{4}$ —40 and $\frac{1}{4}$ —32
No. 3212-T	16" Long	$\frac{1}{4}$ —40 and $\frac{1}{4}$ —32

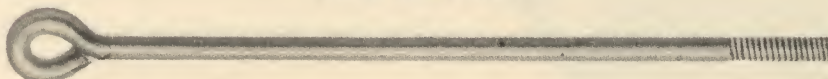
Lever Wires



Plain Brass

No. 3405—Plain Brass 9" Long No. 3406—Plain Brass 12" Long

Tank Ball Stems



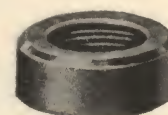
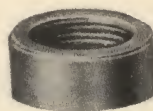
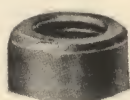
No. 3407 Monel Metal, will not corrode $5\frac{3}{8}$ " Long
 No. 3408 Copper $4\frac{3}{4}$ " Long



Woodward Wanger Co.

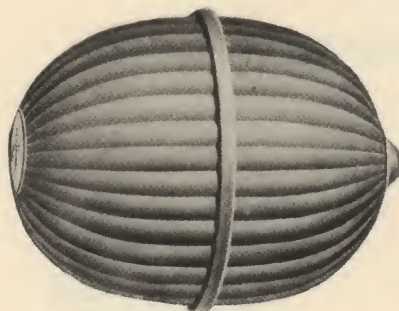


Brass Seat Caps



No.	Outside Diameter	Tapped	Used With
2995	43/64 in.	566-24	W-W Kwyet Ball Cock
3254	42/64 in.	.28	W-W Little Samson & Beaver Ball Cock
3255	39/64 in.	.566-24	Special
3256	43/64 in.	.622-24	W-W No. 3015 and B. V. C.
3257	43/64 in.	.622-27	Douglas — Small Wolff Ball Cock
3258	43/64 in.	.625-27	Hamilton, Gem, Peerless
3259	47/64 in.	.692-30	"Try Me" and M. V. B.
3260	51/64 in.	.756-27	Success and McShane
3261	51/64 in.	.745-27	Success and McShane
3262	48/64 in.	.692-20	Coyne & Delaney
3263	44/64 in.	.622-27	Hartford
3264	48/64 in.	.692-28	W-W Compound Lever Ball Cock
3267	.....	.....	For T/N Ball Cock

Copper Float Balls



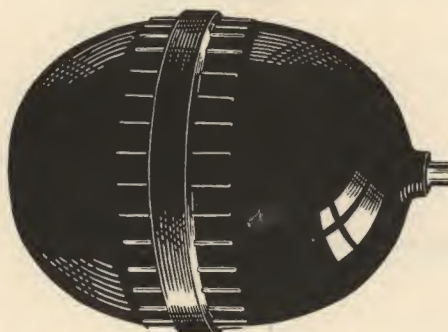
No. 3272

Corrugated Copper Floats

These corrugated Brass Floats are built for long wear and guaranteed not to leak. Their light weight insures great buoyancy, and the flush set spud permits insertion in the smallest space.

No. 3272. 8 ounce 4" x 5"

Packed 12 to a carton



No. 3280

Plastic Floats

A black Plastic Float in the popular 4" x 5" size.

Water, no matter what the chemical content may be, has no effect, for there is nothing to rust or corrode.

This Plastic Float is practically indestructible.

Packed 12 to a carton

No. 3280 Size 4 x 5"



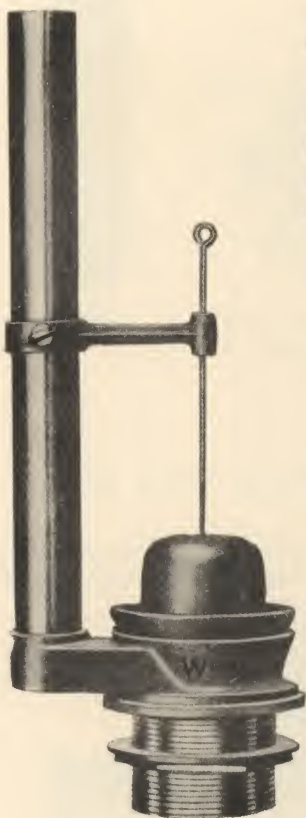
Woodward Wanger Co.



Flush Valves

THE Bodies of these valves are made from the very highest quality of metal, carefully machined and finished with deep, clean, accurate threads. The valve seats are beveled at the correct angle and smoothly finished. This assures perfect contact and easy seating for tank balls. The flush of all three valves is a full 2" which requires a 2½" tank ball, and Nos. 3293 and 3293-B are supplied this way.

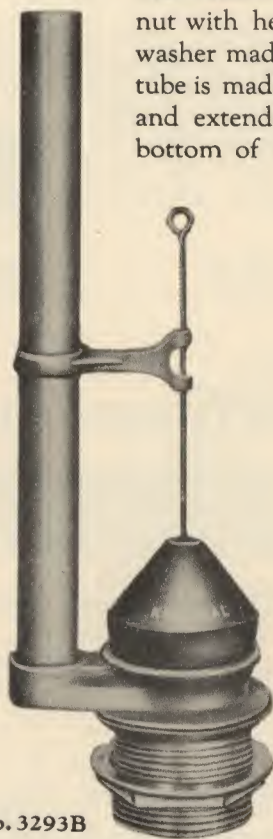
The Shank fittings consist of a substantial lock nut with hexagon, and improved flange shank washer made of the best rubber. The overflow tube is made of 20 gauge tubing and extends to 11½" from the bottom of tank to top of tube.



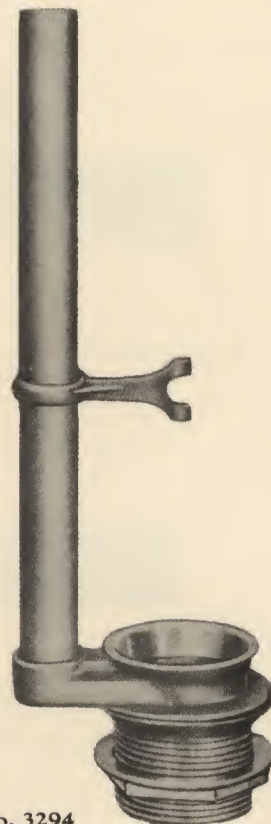
No. 3293

NOTICE

When purchasing No. 3293 you have the choice of either the Cushioned Mushroom Parabal, or the Heavy Duty Mushroom Parabal.



No. 3293B



No. 3294

Catalog Number and Description

- No. 3293 Flush Valve 2½" Complete with 2½" Mushroom Parabal, stem, lever wire and guide.
- No. 3293B Flush Valve 2½" Complete with 2½" Kone Bal, stem, lever wire and guide.
- No. 3294 Flush Valve 2½" with guide. No stem, ball or wire.



Woodward Wanger Co.



High Tank Valves

Ball Flush Valve—For High Tank



No. 3297. This Valve has $1\frac{1}{4}$ " Flush, and requires a Flush Ball of 2" diameter. Comes fitted with 2" Mushroom Parabal, Coupling Nut, Stem and lever wires. No tail piece.

No. 3297-C. Complete as described above, but including a tail piece.



Cone Syphon Tank Valve — Brass Cone —

No. 3299 - Size $1\frac{1}{4}$ ", Syphon Only, no Seat or Tail Piece

No. 3300 - Size $1\frac{1}{4}$ ", Syphon with Seat, no Tail Piece

No. 3301 - Size $1\frac{1}{4}$ ", Syphon with Seat, Tail Piece Complete



Tail Pieces for Lead Pipe

No. 3310 Size $1\frac{1}{4}$ " (for seats No. 3308 and 3309)

No. 3311 Size $1\frac{1}{2}$ " (for seats No. 3308 and 3309)



Flush Valve Seat

No. 3308 Valve Seat, Complete Coupling Nuts $1\frac{1}{4}$ "

No. 3309 Valve Seat, Complete - Coupling Nuts $1\frac{1}{2}$ "

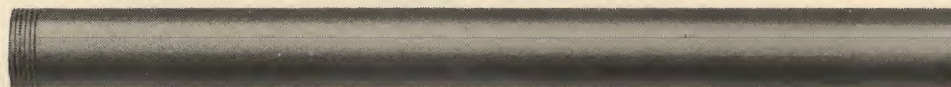
Overflow Tubes



Threaded Both Ends

Will Fit Either 1" or $1\frac{1}{8}$ " Tapping—11" Long
No. 3316. 17 Gauge Seamless Brass Tubing.

Threaded One End



Plain Brass 1"

No.	Gauge	Size
3317	20	1"x11"
3318	17	1"x11"

Plain Brass $1\frac{1}{8}$ " and $1\frac{1}{4}$ "

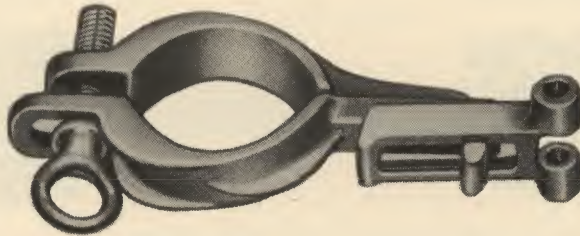
No.	Gauge	Size
3319	17	$1\frac{1}{8}$ "x11"
3320	17	$1\frac{1}{4}$ "x11"



Woodward Wanger Co.

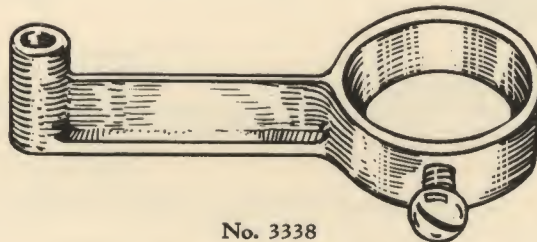


Guides—For Flush Valves



An all purpose Brass guide that will readily fit either 1", 1 $\frac{1}{8}$ " or 1 $\frac{1}{4}$ " tubes. Also adjustable for length and all adjustments are made tight with just one screw. Simple in construction, dependable in use.

No. 3337..... Plain Brass



No. 3338

Double-Arm Guide

No.

3338.....

To Fit Overflow Tube

1 in.



Closet Pulls

No. 3346 Oak with Rubber Bumper N. P.
Trimmings

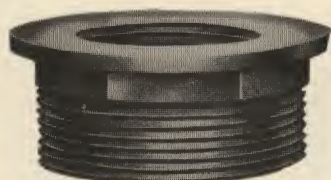


Woodward Wanger Co.



Closet Spud Increaser - Reducer

Closet Spud Reducer



No. 3350—Chrome Plated Brass1¼" x 2"
No. 3351—Chrome Plated Brass1½" x 2"

Closet Spud Increaser



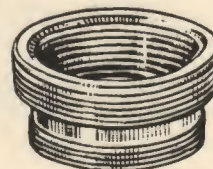
No. 3355—Chrome Plated Brass2" x 1¼"
No. 3356—Chrome Plated Brass2" x 1½"

Closet Spud



No. 33711¼"
No. 33731½"
No. 33722"

Bushing for Overflow Tubes



For increasing or reducing overflow tube size,
from 1" to 1⅛" or from 1⅛" to 1".
No. 3374Brass

Galvanized Friction Ring Only

No. 3371-R
For Closet Spud No. 3371

No. 3372-R
For Closet Spud No. 3372

No. 3373-R
For Closet Spud No. 3373



Cotter Pin Assortment

No. 3425 - Consisting of 100 Cotter Pins
20 each of the following sizes.

⅛" x ¾"
⅛" x 1"

5/32" x 1"

3/16" x 1"
3/16" x 1¼"

Cotter Pins

Made from Spring Brass

No. 3419—⅛" x ¾"
No. 3420—⅛" x 1"
No. 3421-A—5/32" x 1"

No. 3421-B—3/16" x 1"
No. 3422—3/16" x 1¼"

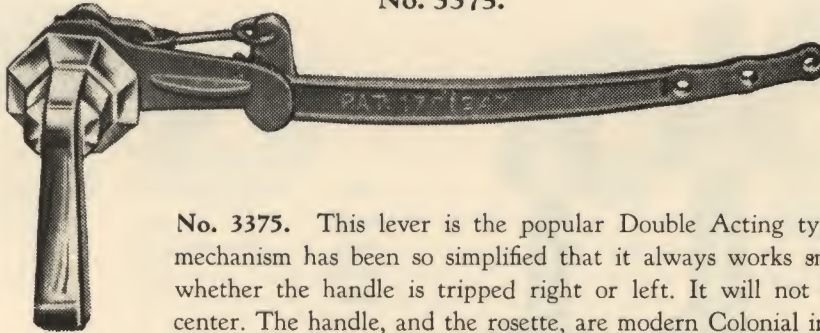


Woodward Wanger Co.



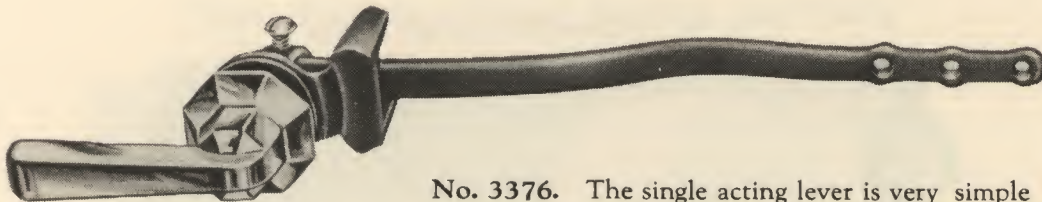
Double Acting Tank Levers

No. 3375.



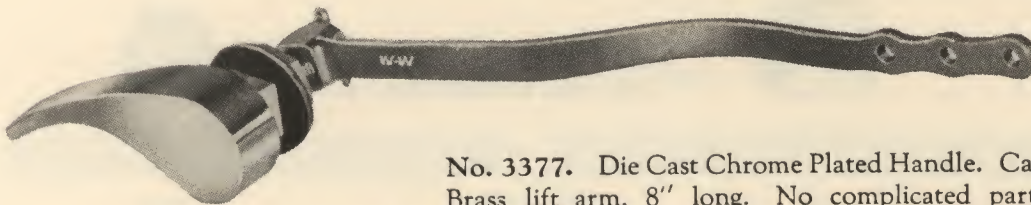
No. 3375. This lever is the popular Double Acting type. The mechanism has been so simplified that it always works smoothly, whether the handle is tripped right or left. It will not stick or center. The handle, and the rosette, are modern Colonial in design and beautifully chrome plated. Has a cast brass 8" lift arm and a $\frac{5}{8}$ " shoulder to fit standard tank punching.

Single Acting Tank Levers



No. 3376. The single acting lever is very simple in construction and Combined with our Colonial designed handle and rosette, makes a very pleasing and satisfactory combination. The handle and rosette are Chromium Plated. The 8" lift arm is Cast Brass, and it has a $\frac{5}{8}$ " shoulder to fit standard tank punching.

Single Acting Tank Levers



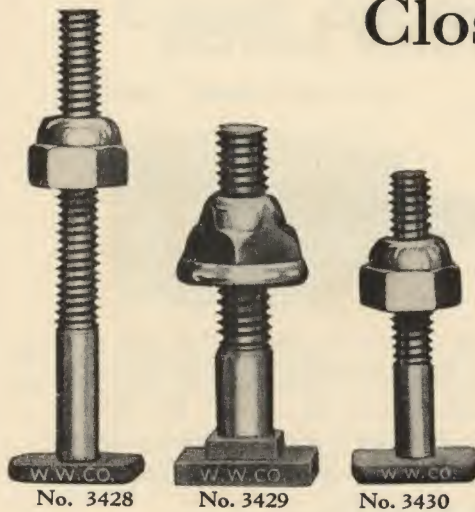
No. 3377. Die Cast Chrome Plated Handle. Cast Brass lift. arm, 8" long. No complicated parts. Nothing to stick or get out of order. Easy to install, smooth action. Moderately priced.



Woodward Wanger Co.



Closet Bolts



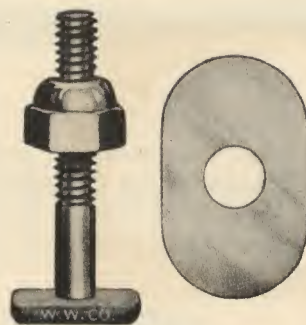
Brass Closet Bolts With Chrome Open Brass Heads (Less Washers)

No.	Length Under Head	Diameter	Thread
3427	2 1/4"	5/8"	18
3428	2 1/2"	1/4"	20
3429	1 3/4"	5/8"	18
3430	1 3/4"	1/4"	20

Brass Closet Bolt Combination

Consists of our No. 3430 Brass Closet Bolt with Chrome Plated Open Brass Head, (listed above) and our No. 3482 Chrome Oval Shaped Brass Washer

Packed 100 Sets per Carton



No. 3433

No.
3433.....Complete Set (Bolt, Head and Washer)



ORDER BY NUMBER



No. 3471

Brass Heads—Chrome Plated
Open Tops for Closet Bolts, Etc.



No. 3470

No.	Tapped
3470	1/4"
3471	5/8"



Woodward Wanger Co.



Brass Washers.



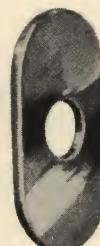
No. 3482



No. 3483



No. 3486



No. 3487

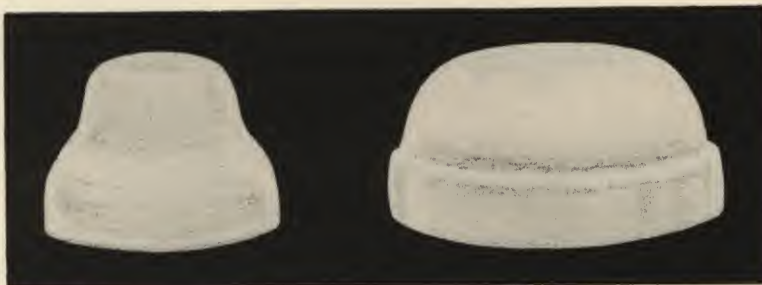
Regular Weight Chrome Plated Only

No.	Length	Width
3482	1 1/4 in.	3/4 in.
3483	7/8 in.	7/8 in.

Extra Heavy Chrome Plated Only

No.	Size
3486	7/8" O.D., 3/8" hole
3487	1 1/4" long, 3/4" wide, 3/8" hole

China Caps for Closet Screws and Bolts

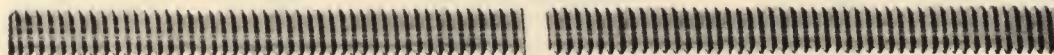


No. 3435

No. 3436

No.	Size
3435	1" high, 1 3/8" Diameter, 1-1/16" hole
3436	1" high, 1 3/4" x 1-5/16" Diameter, 1" x 1 3/8" hole

Threaded Brass Rod



Nos. 3410

IN ONE FOOT LENGTHS

No.	Description
3410	1/4 in. Diameter, No. 20 Thread

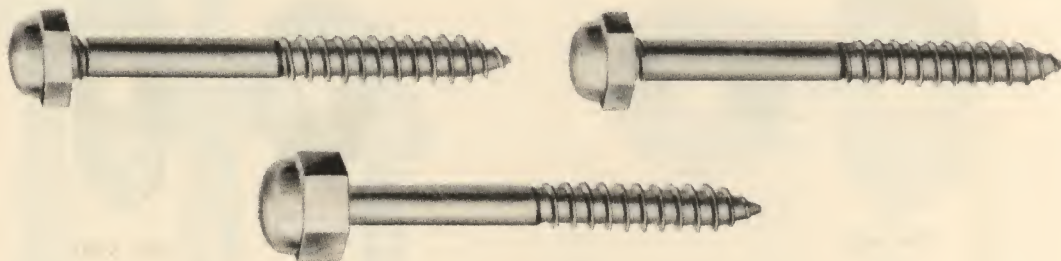


Woodward Wanger Co.



Closet Screws and Heads

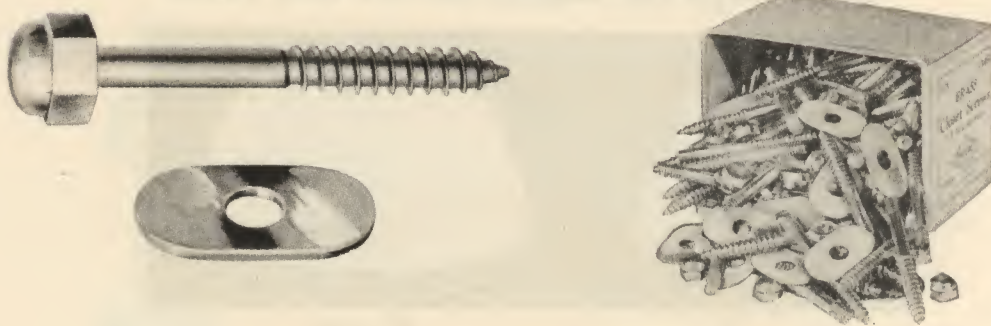
Chrome Plated Brass, Removable Heads



No.		Diameter	Length
3445.....	(Iron Brass Plated)	$\frac{1}{4}$ in.	$2\frac{3}{8}$ in.
3447	(Brass)	$\frac{1}{4}$ in.	$2\frac{3}{8}$ in.
3448.....	(Brass)	$\frac{1}{8}$ in.	$2\frac{1}{2}$ in.
3449.....	(Brass)	$\frac{1}{8}$ in.	$3\frac{1}{2}$ in.

Closet Screw Combinations

No. 3452



- 100—No. 3447 Brass Closet Screws with Removable N. P. Brass Head No. 3461
 100—No. 3487 N. P. Oval Shaped Brass Washer, Extra Heavy

Brass Heads-

Chrome Plated



No. 3461

CLOSED TOPS
 Packed 100 to a Box



Chrome Plated

No. 3462

No. Tapped Used on Closet Screws
 3461..... $\frac{1}{4}$ in. No. 3447

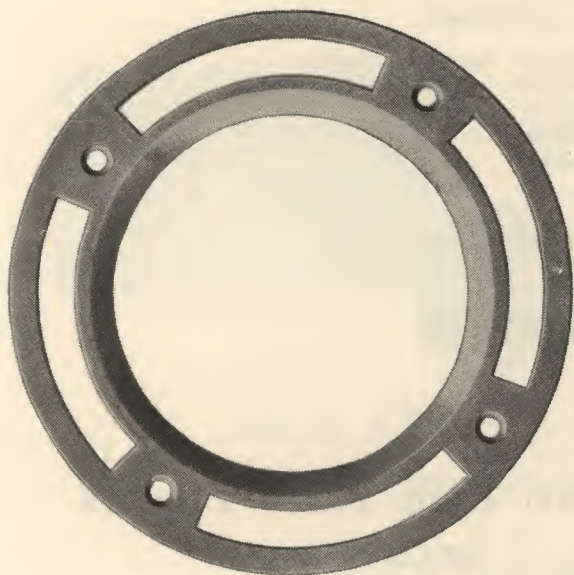
No. Tapped Used on Closet Screws
 3462..... $\frac{5}{16}$ in. Nos. 3448 and 3449



Woodward Wanger Co.



Closet Floor Flanges



No. 3440

Closet Floor Flanges

CAST BRASS—LIGHT

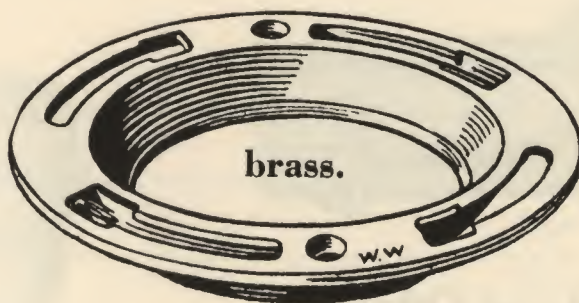
No.	Outside Diameter	Inside Diameter	Weight
3440	6 $\frac{7}{8}$ in.	4 $\frac{1}{4}$ in.	9 oz.

Closet Floor Flanges

CAST BRASS—HEAVY

No.	Outside Diameter	Inside Diameter	Weight
3441	6 $\frac{7}{8}$ in.	4 $\frac{3}{8}$ in.	14 oz.

Heavy "Buffalo" Type Flange



Brass Deep Cup Floor Flange

No. 3439

Outside Diameter, 7"; Inside Diameter of Bell Opening, 4 $\frac{1}{4}$ " Some localities prefer this deep, heavy type floor flange.

No. 3439

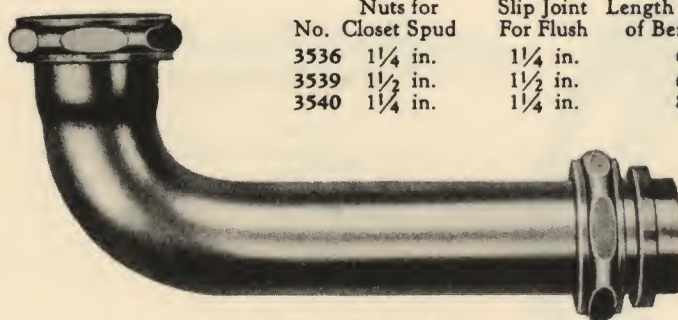


Woodward Wanger Co.



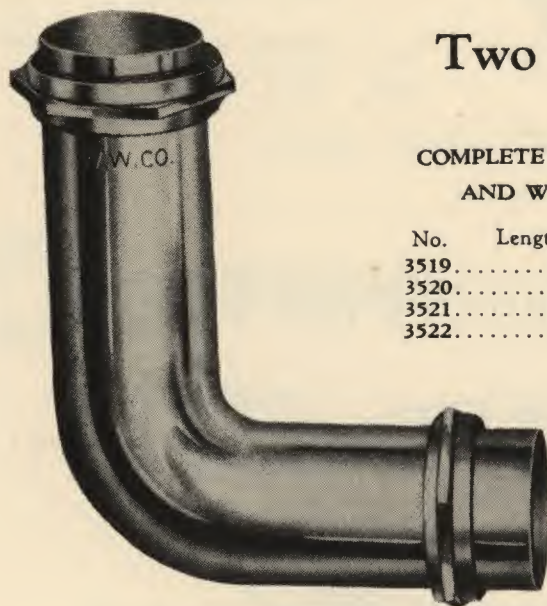
Closet Flush Elbows

BRASS - CHROME



For High Tanks

No.	Nuts for Closet Spud	Slip Joint For Flush	Length from Center of Bend to End
3536	1 1/4 in.	1 1/4 in.	6 in.
3539	1 1/2 in.	1 1/2 in.	6 in.
3540	1 3/4 in.	1 1/4 in.	8 in.



Two Inch Flush Elbows

BRASS - CHROME

COMPLETE WITH NUTS
AND WASHERS

WITHOUT NUTS
AND WASHERS

No.	Length, Center to End	No.	Length, Center to End
3519.....	4 x 6 in.	3523.....	4 x 6 in.
3520.....	5 x 7 in.	3524.....	5 x 7 in.
3521.....	6 x 8 in.	3525.....	6 x 8 in.
3522.....	7 x 9 in.	3526.....	7 x 9 in.

Closet Offsets

BRASS - CHROME

COMPLETE WITH NUTS
AND WASHERS

WITHOUT NUTS AND
WASHERS

No.	Offset, Center to Center	No.	Offset, Center to Center
3551.....	1 in.	3560.....	1 in.
3552.....	1 1/2 in.	3561.....	1 1/2 in.
3553.....	2 in.	3562.....	2 in.
3554.....	2 1/2 in.	3563.....	2 1/2 in.
3555.....	3 in.	3564.....	3 in.

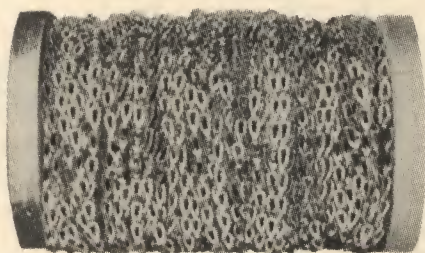




Woodward Wanger Co.



Plumber's Chain



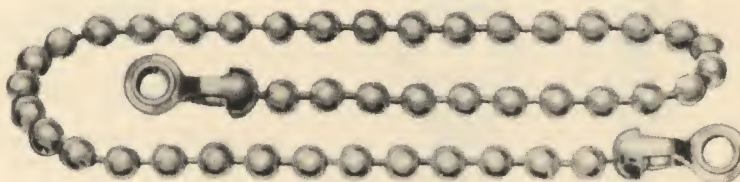
Plumber's Chain



No.	No. Feet to Reel	Size
3579	250	00
3581	250	1

Bead Chain — Chrome Only

Bead Pattern Chain in Continuous Length



No.
3600 Order by the foot

Bead Pattern Bath and Basin Chains

"Jump" Couplings furnished with each of these chains, as shown.

No.	Length	For
3598	11 in.	Basin
3599	15 in.	Bath

Type A



"Jump" Couplings

For Use with Bead Pattern Chain

Type B



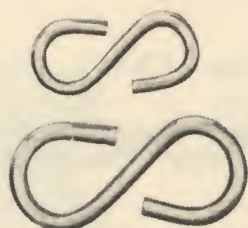
No. 3601 Type A Jump Couplings
No. 3602 Type B Jump Couplings



Woodward Wanger Co.



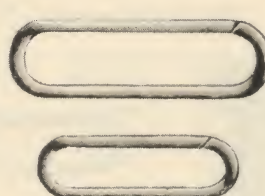
Hooks, Links, Rings, etc.



Eight Hooks

Brass—Chrome

No.	Size
3609	Small
3610	Medium



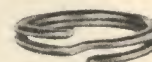
Split Links

Brass—Chrome

No.	Size
3616	Small
3617	Large



No. 3618

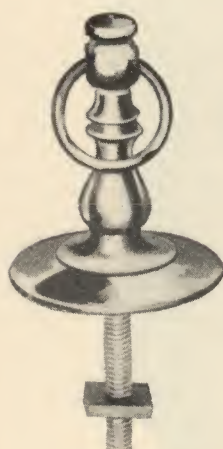


No. 3619

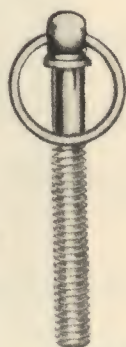
Split Rings

Brass—Chrome

No.	O.D.
3618	$\frac{3}{4}$ " O.D.
3619	$\frac{3}{4}$ " O.D.



No. 3622



No. 3625



No. 3620

Chain Stays

Brass — Chrome

No.	O. D. of Base	Length of Bolt Under Base	Thread	Nut
3620	$\frac{7}{16}$ in.	$1\frac{5}{8}$ in.	10-24	Square
3622	2 in.	2 in.	9-28	Square
3625	$\frac{5}{16}$ in.	$1\frac{3}{8}$ in.	$\frac{1}{4}$ -20	No Nut

Faucet Hole Covers

Brass — Chrome

All Heads $1\frac{3}{4}$ " Diameter

No. 3628 Wrought Brass. Length of bolt under head $2 - 11/16$ ", threaded $3/16$ "-28. Square Nut

No. 3629 Wrought Brass. Length of bolt under head $1\frac{3}{4}$ ", threaded $5/16$ -18. Flanged Hexagon Nut.



No. 3629



No. 3628

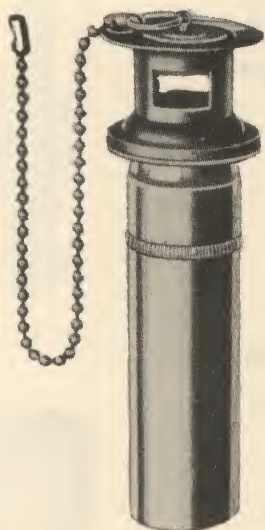


Woodward Wanger Co.



P. O. Plugs with Tail Piece

Beaded Chrome Chain and Solid White Stoppers

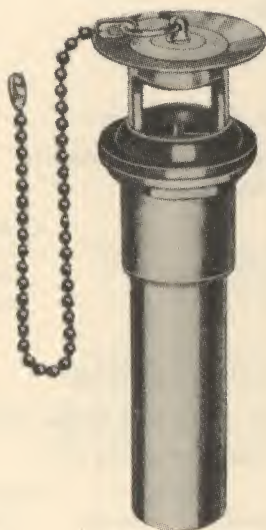


P. O. Plug with Cast Top

Polished Chrome

No. 3650

Cast Brass Top and Collar, $2\frac{3}{4}$ " long, $1\frac{1}{4}$ " x 20 gauge wrought brass tail piece 6" long. Supplied with beaded chrome chain and white rubber stopper.



Cast Brass Plug

Polished Chrome

No. 3656

An all-cast Brass Plug (except tail piece), $2\frac{3}{4}$ " long. Two-piece tail piece, top consisting of a cast brass flanged sleeve into which is screwed a tail piece $1\frac{1}{4}$ " O.D., 17 gauge. Both sleeve and tail piece polished chrome. Length 5" under collar. Supplied with beaded chrome chain and white rubber stopper.



Woodward Wanger Co.



Sink and Urinal Connections



Sink Funnel

BRASS—CHROME PLATED

No.	Size	Tail Piece
3670	1 1/4"	6"
3671	1 1/2"	6"
3672	2"	3"
3673	1 1/2"	10"

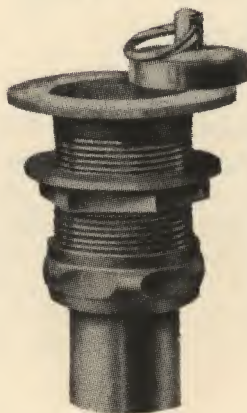
Urinal Connection

BRASS—CHROME PLATED

No.	Size and Description
3674	1 1/4 in. Length over all, 4 1/2 in. Length of Tube part, 3 in. Diameter at Top, 2 1/4 in.
3675	1 1/2 in. Length over all, 4 1/2 in. Length of Tube part, 3 in. Diameter at Top, 2 1/2 in.



Laundry Tray Plugs



—Plug with Coupling—
Top Polished Brass, with Finished
Brass Stopper.

No.	Size	Thread	Flange	Length of Thread
3722	1 1/4"	1 1/4" I.P.	3"	2 3/8"
3723	1 1/2"	1 1/2" I.P.	3"	2 3/4"

—Plug without Coupling—
Top Polished Brass with Finished Brass Stopper,
less tail piece and coupling nut.

No.	Size	Thread	Flange	Length of Thread
3725	1 1/2"	1 1/2" I.P.	3"	2 3/4"



Woodward Wanger Co.



Faucet Repairs



Nos. 3730-3731

Brass Faucet Repairs—Polished COMPLETE

No.	For Faucets
3730.....	1/2 in.
3731.....	3/8 in.

Brass Faucet Repairs—Polished LESS HANDLES

No.	For Faucets
3732.....	1/2 in.
3733.....	3/8 in.

Brass Faucet Hose Ends

FOR SOLDERING TO SPOUT OF PLAIN FAUCET

No.	For Faucets
3736.....	1/2 in.
3737.....	3/8 in.



Royle Hose Connection

For Attaching Hose to Plain Bibb

No.	For Faucets
3742.....	For Attaching Hose to Plain Faucet 1/2 in.
3743.....	For Attaching Hose to Plain Faucet 3/8 in.

Rubber Washers for Royle Hose Connections

552.....	For 1/2 in. Faucets	553.....	For 3/8 in. Faucets
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Anti-Splash Water Filter

Anti-Splash, Chrome Plated. Fitted with Sanitary Screen and Rubber Washers. Two sizes.

No. 3744—For 1/2" Faucets
No. 3745—For 3/8" and 1/4" Faucets





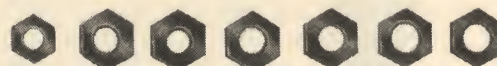
Woodward Wanger Co.



Faucet Screws and Nuts



No. 3753 No. 3754 No. 3755 No. 3756 No. 3757 No. 3758 No. 3759



3762 3763 3764 3765 3766 3767 3768



ONE GROSS ASSORTMENT

Brass

Bibb Screws and Nuts

No. 3750

Consists of 72 screws and 72 nuts. An equal quantity of each of the following sizes:

Screw Gauge No.	Threads to the Inch
6	32
8	32
9	32
9	24
10	32
10	28
10	24

ONE GROSS ASSORTMENT

Brass

Bibb Screws Only

No. 3751

Consists of 144 screws ONLY—all $\frac{3}{8}$ " long. An equal quantity of each of the following sizes:

Screw Gauge No.	Threads to the Inch
6	32
8	32
9	32
9	24
10	32
10	28
10	24



Woodward Wanger Co.



Faucet Screw Assortments



MONEL METAL

Screws Only — $\frac{3}{8}$ " Long

No. 3751.M

ONE GROSS ASSORTMENT

Screw Gauge No	Threads to the inch
6	32
8	32
9	32
9	24
10	32
10	28
10	24

Monel Metal will not rust or corrode, so it is the ideal material from which to make faucet screws. They cost a little more and are well worth it,

Two Gross Brass Bibb Screws and a 10/24 Tap

Make one screw do all jobs by tapping the hole $10/24$. Simple and economical.



No. 3752

288 Brass Bibb Screws, All $10/24$

240 Screws $\frac{3}{8}$ "
48 Screws $\frac{1}{2}$ "

You're never at loss for the right size screw.

With this handy Box of Bibb Screws you are equipped to do every job.



Woodward Wanger Co.



Faucet Screws and Nuts



No. 3753 No. 3754 No. 3755 No. 3756 No. 3757 No. 3758 No. 3759

Brass or Monel Metal Bibb Screws Length— $\frac{3}{8}$ Inch

No.	Size
3753	6-32
3754	8-32
3755	9-32
3756	10-32
3757	10-28
3758	9-24
3759	10-24

*MONEL METAL—If any of the above screws are wanted in Monel Metal add "M" to Catalog Number.

Brass Bib Screws Length— $\frac{1}{2}$ Inch

No.	Size
L-3753	6-32
L-3754	8-32
L-3755	9-32
L-3756	10-32
L-3757	10-28
L-3758	9-24
L-3759	10-24

Faucet Screw Nuts



3762 3763 3764 3765 3766 3767 3768

Brass Faucet Nuts

ACCURATE SIZES—PERFECT THREADS

No.	Size
3762	6-32
3763	8-32
3764	9-32
3765	10-32
3766	10-28
3767	9-24
3768	10-24



Woodward Wanger Co.



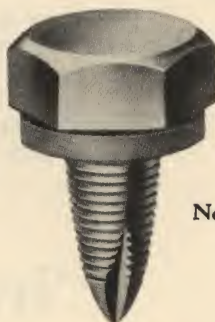
"Handy" Tap Repair Plugs



No. 3776



No. 3777



No. 3778

SELF TAPPING—SELF THREADING

No.	Diameter Under Head	Length Under Head	Diameter of Hexagonal Head
3775.....	1/4 in.	3/8 in.	1/2 in.
3776.....	5/8 in.	3/4 in.	5/8 in.
3777.....	3/8 in.	7/8 in.	3/4 in.
3778.....	5/8 in.	1 in.	7/8 in.
3779.....	1/2 in.	1 1/8 in.	1 in.

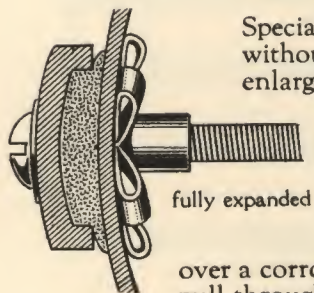
Fine Thread Repair Plug Assortment



For the convenience of our customers who desire to have a complete assortment of all sizes of the **Handy Tap Repair Plugs** available at all times, we pack two different assortments.

No.	Description
3781.....	Box containing 3 dozen, assorted sizes
3782.....	Box containing 6 dozen, assorted sizes

Boiler Repair Plugs

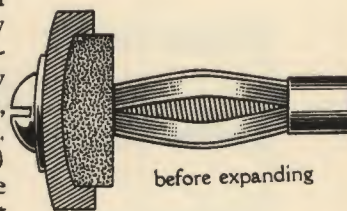


fully expanded

Special New Type Expansion Boiler Plug, installed without the use of any special tools. You merely enlarge the leak in the boiler to a 3/8" opening, insert this boiler plug, and with screw driver draw up as tight as possible, and you have a permanent repair. (See "fully expanded" illustration) It makes a "5-point contact" on the inside of the Boiler reaching out

over a corroded area of 1 1/8", therefore, it will not cut or pull through the weakened walls.

No. 3784 One Size Only for all Repairs



before expanding



Woodward Wanger Co.



No. 3785

Boiler Repair Plugs

Case hardened tool steel. Plated. Coarse threads which will follow the thickness of the metal in the boiler, and permit pulling the washer up tight.

Furnished with Red Fibre Washer

No. 3785	.....	3/8"
No. 3786	.....	7/16"



Iron Sink Bolts

Iron Sink Bolts

1/4 Inch

Sink bolts 1 1/4 in. and less are furnished with one square iron nut.

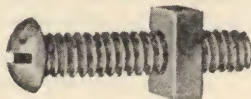
Sink bolts 1 1/2 in. and longer are furnished with two square iron nuts.

No.	Length
3935	1 in.
3936	1 1/4 in.
3937	1 1/2 in.
3938	2 1/4 in.
3939	2 1/2 in.
3940	3 in.



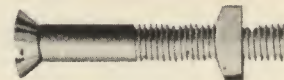
Iron Stove Bolts

1/4"



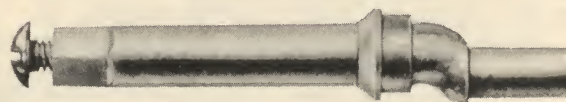
No.	Length
3971. Brass	1 1/2 in.

Wash Tray Bolts



No.	Length
3820. Round Head	3/4 in.
3822. Round Head	1 in.

Fuller Repairs



Fuller Eccentrics

No.	Size	Requires Hole in Stem
3990	3/8 in.	1/4 in.
3991	1/2 in.	9/32 in.

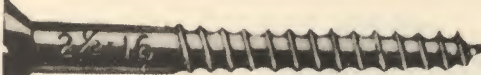
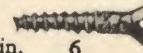
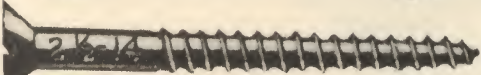
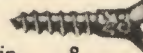
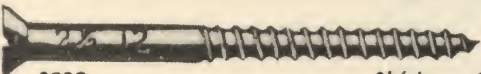
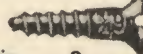
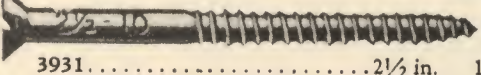
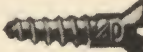
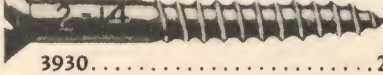
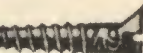
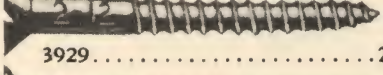
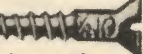
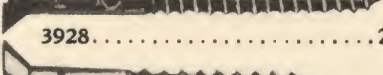
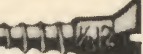
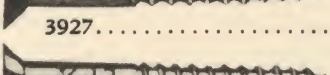
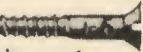
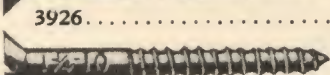
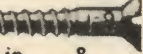
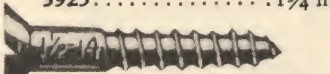
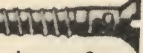
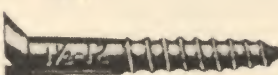
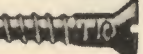
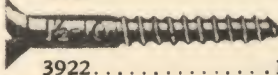
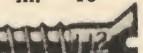
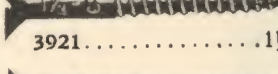
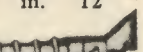
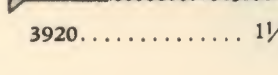
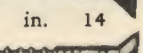
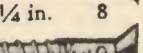
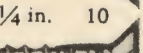
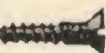
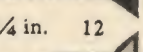


Woodward Wanger Co.



Flat Head Bright Steel Screws

ILLUSTRATIONS ACTUAL SIZE

 3934..... 2½ in. 16	 3903.... ¾ in. 6
 3933..... 2½ in. 14	 3904.... ¾ in. 8
 3932..... 2½ in. 12	 3905..... ¾ in. 9
 3931..... 2½ in. 10	 3906..... ¾ in. 10
 3930..... 2 in. 14	 3907..... ⅞ in. 9
 3929..... 2 in. 12	 3908..... ⅞ in. 10
 3928..... 2 in. 10	 3909..... ⅞ in. 12
 3927..... 1¾ in. 14	 3910..... 1 in. 6
 3926..... 1¾ in. 12	 3911..... 1 in. 8
 3925..... 1¾ in. 10	 3912..... 1 in. 9
 3924..... 1½ in. 14	 3913..... 1 in. 10
 3923..... 1½ in. 12	 3914..... 1 in. 12
 3922..... 1½ in. 10	 3915..... 1 in. 14
 3921..... 1½ in. 8	 3916..... 1¼ in. 8
 3920..... 1½ in. 6	 3917..... 1¼ in. 10
 3901... ½ in. 6	 3918..... 1¼ in. 12
 3902... ⅝ in. 7	 3919..... 1¼ in. 14



Woodward Wanger Co.



Adjustable Fuller Stems

Accurately Machined



These stems can be adjusted to fit any Fuller Faucet. All stems are fitted with Genuine Enduro Fuller Balls and solid brass Fuller Stem Caps.

No.	Size of Fuller Ball	Hole in Stem	No.	Size of Fuller Ball	Hole in Stem
4003.....	$\frac{3}{8}$ in.	$\frac{9}{32}$ in.	4009.....	$\frac{5}{8}$ in.	$\frac{9}{32}$ in.
4004.....	$\frac{3}{8}$ in.	$\frac{1}{4}$ in.	4010.....	$\frac{5}{8}$ in.	$\frac{1}{4}$ in.
4006.....	$\frac{1}{2}$ in.	$\frac{9}{32}$ in.	4012.....	$\frac{3}{4}$ in.	$\frac{9}{32}$ in.
4007.....	$\frac{1}{2}$ in.	$\frac{1}{4}$ in.	4013.....	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.

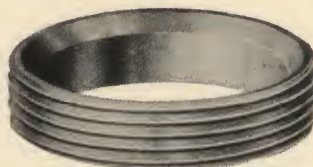
Copper Fuller Caps



No.	ACCURATE SIZES	Size
4014.....		$\frac{3}{8}$ in.
4015.....		$\frac{1}{2}$ in.
4016.....		$\frac{9}{16}$ in.
4017.....		$\frac{5}{8}$ in.
4018.....		$1\frac{1}{16}$ in.
4019.....		$\frac{3}{4}$ in.

Threaded Collars and Trap Bushings

I. P. Thread Outside, Fine Thread Inside



No.	Threaded	Reamed for Tube
4035.....	$1\frac{1}{4}$ "	$1\frac{1}{4}$ " O. D.
4037.....	$1\frac{1}{2}$ "	$1\frac{1}{4}$ " O. D.
4038.....	$1\frac{1}{2}$ "	$1\frac{3}{8}$ " O. D.
4039.....	$1\frac{1}{2}$ "	$1\frac{1}{2}$ " O. D.

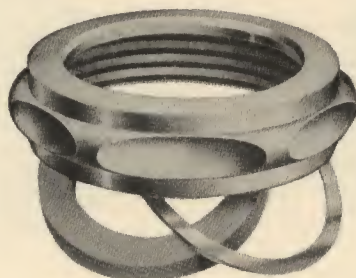


Woodward Wanger Co.



Slip Joint Nuts

Supplied with Brass Friction Rings and Rubber Slip Joint Washers



Chrome

Plated

Chrome	Sizes Tapped for I. P. Thread	Reamed for
No. 4054-C	1 1/4"	1 1/4" O. D. Tube
No. 4055-C	1 1/4"	1 3/8" O. D. Tube
No. 4056-C	1 1/2"	1 1/4" O. D. Tube
No. 4057-C	1 1/2"	1 3/8" O. D. Tube
No. 4058-C	1 1/2"	1 1/2" O. D. Tube
No. 4059-C	2"	2" O. D. Tube

Slip Joint Nuts

For Supply Pipes. Furnished with Brass Friction Rings, and Rubber Slip Joint Washers

Chrome	Tapped for I. P. Thread	Reamed for
No. 4065-C	3/8" 1/8" I. P. Size	
No. 4066-C	1/2" 1/4" I. P. Size	
No. 4067-C	3/4" 3/8" I. P. Size	
No. 4068-C	3/8" 7/16" O. D. Tubing	
No. 4069-C	1/2" 7/8" O. D. Tubing	
No. 4070-C	1/2" 1/2" O. D. Tubing	
No. 4071-C	1/2" 9/16" O. D. Tubing	



Basin Supply Couplings

Polished Chrome

No.	Size
4139-R	3/8" I. P. x 1/4" I. P.
4139-C	3/8" I. P. x 1/4" I. P.
4140-R	1/2" I. P. x 1/4" I. P.
4140-C	1/2" I. P. x 1/4" I. P.



Woodward Wanger Co.

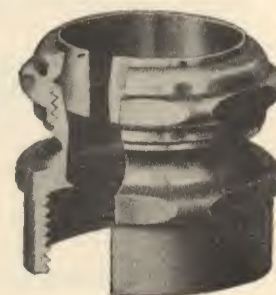


Ground Joint Connections



Male I. P. Threads

No.	Threaded	To Slip
4085	... 1 1/4 in. I. P.	1 1/4 in. O. D. Tubing
4086	... 1 1/2 in. I. P.	1 1/4 in. O. D. Tubing
4087	... 1 1/2 in. I. P.	1 3/8 in. O. D. Tubing
4088	... 1 1/2 in. I. P.	1 1/2 in. O. D. Tubing

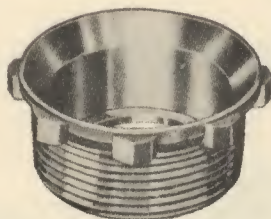


Female I. P. Threads

No.	Threaded	To Slip
4081	... 1 1/4 in. I. P.	1 1/4 in. O. D. Tubing
4082	... 1 1/2 in. I. P.	1 1/4 in. O. D. Tubing
4083	... 1 1/2 in. I. P.	1 3/8 in. O. D. Tubing
4084	... 1 1/2 in. I. P.	1 1/2 in. O. D. Tubing

Trap Bushings

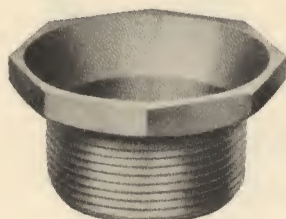
For Connecting Brass Tubing to Iron Pipe



To Solder Tube, Male

No.	I. P. Thread Outside	Inside Reamed for Tube
4100	... 1 1/4"	1 1/4" O. D.
4102	... 1 1/2"	1 1/4" O. D.
4103	... 1 1/2"	1 3/8" O. D.
4104	... 1 1/2"	1 1/2" O. D.

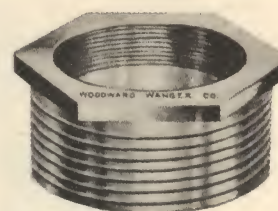
Lead Pipe to Iron Pipe, Male
Bell Mouth Pattern



No.	I. P. Thread Outside	Inside Reamed for Lead Pipe
4114	... 1 1/4"	1 1/4"
4116	... 1 1/2"	1 1/2"
4116A	... 2"	2"

To Solder Tube, Female

I. P. Thread Outside, Fine Thread Inside



No.	I. P. Thread Outside	Inside Reamed for Tube
4117	... 1 1/4"	1 1/4" O. D.
4119	... 1 1/2"	1 1/4" O. D.
4120	... 1 1/2"	1 3/8" O. D.
4121	... 1 1/2"	1 1/2" O. D.

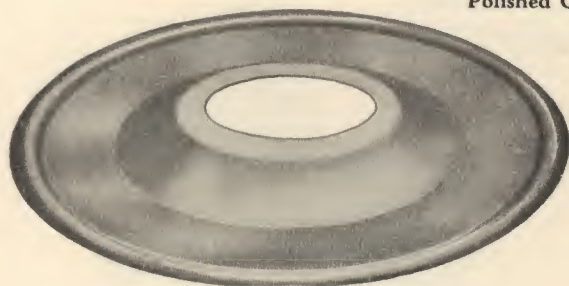


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Brass Flanges

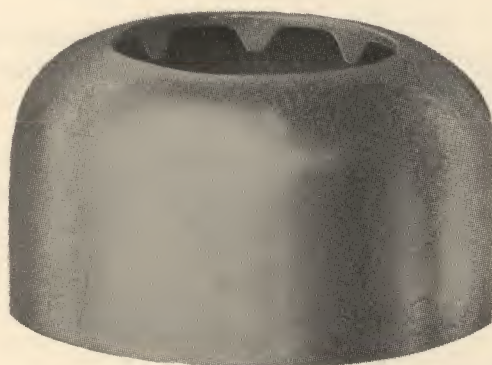
Polished Chrome Finish



No.	Dia. at Base	Hole to Fit
4151	3"	1/2" Faucet
4152	3"	5/8" and 3/4" Faucet



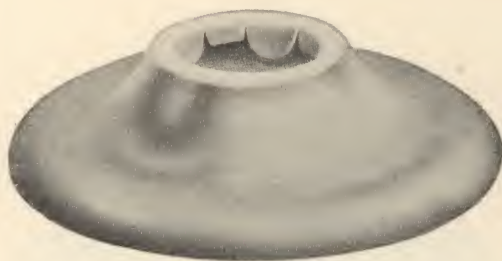
No. 4171			
No.	Size	Diam. at Base	Height
4171	2 in.	3 1/2 in.	3/4 in.



High Brass Flange

Polished Chrome

No.	Diam.	Height	Hole to Fit
4163	3"	1 7/8"	1 1/4" O.D. Tube
4164	3"	1 7/8"	1 1/2" O.D. Tube



Hole for Iron Pipe Sizes

No.	Hole for	Diam. at Base
4177	3/8" I.P.	2 1/2"
4178	1/2" I.P.	2 1/2"
4179	3/4" I.P.	3"
4181	1 1/4" I.P.	3 1/2"
4182	1 1/2" I.P.	3 1/2"



Hole for Tubing Sizes

No.	Hole for	Diam. at Base
4188	7/16" O.D. Tube	2 1/2"
4189	1/2" O.D. Tube	2 1/2"
4190	9/16" O.D. Tube	2 1/2"
4192	3/4" O.D. Tube	2 1/2"
4193	1" O.D. Tube	3"
4194	1 1/4" O.D. Tube	3"
4195	1 1/2" O.D. Tube	3"
4196	1 3/8" O.D. Tube	3"



Woodward Wanger Co.



Basket Sink Strainer and Stopper

CHROMIUM PLATED

No. 4245



Strainer less
tail piece.

The perforated basket is raised or lowered by simply flipping the little wire bail or handle from one side to the other.

When the basket is lowered a complete shut-off is obtained and the sink fills with water. When the basket is raised it makes a clear water-way for the water to drain off.

After draining the Sink, the Basket Strainer can be lifted out and emptied.

No. 4245. For Sinks with 2" to 2½" drillings. Flange 3" in diameter. Body 2¾" long. Extra long Basket 2½" deep.

Cup Type Sink Strainer

Stainless Steel

No. 4252



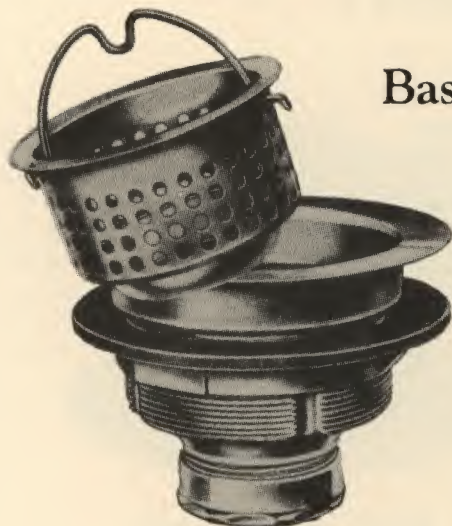
STAINLESS
STEEL

Less Tail Piece

Can't peel, corrode or discolor. The more it's used, the more it shines. Easy to empty and clean. Finger-tip control. Will last a lifetime.



Woodward Wanger Co.



Less Tail Piece

Combination Basket Sink Strainer and Stopper

For $3\frac{1}{2}$ " and 4" Outlets

No. 4250

Polished Chrome Finish

A flip of the handle causes basket to act either as a Strainer or Stopper.

Size—Flange $4\frac{1}{2}$ " diameter Body $3\frac{1}{8}$ " long. Basket 2" deep x $2\frac{3}{8}$ " diameter perforated for quick drainage.

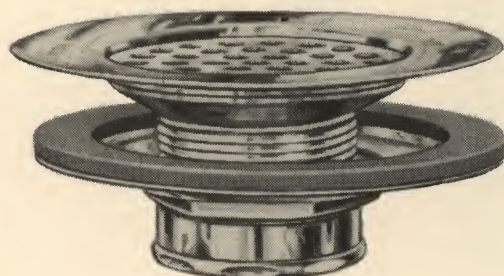
Furnished with heavy cast brass lock nut—I.P.S. coupling nut—large and small durable washers—

Chrome Sink Strainer, Less Tail Piece

For Sinks with $3\frac{1}{2}$ " Outlet

Polished Chrome

No. 4255



No. 4255

Less Tail Piece

Strainer less Tail piece with Satin Chrome Coupling Nut.

Will fit $1\frac{1}{4}$ " or $1\frac{1}{2}$ " Tail Piece.

Diameter of flange $4\frac{1}{2}$ " made to fit sinks with $3\frac{1}{2}$ " outlet.

$2\frac{3}{4}$ " removable strainer for quick draining.

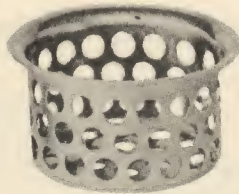
Furnished with Metal and Rubber Washers



Woodward Wanger Co.



Sink Strainers



Crumb Cup for Sink Strainer

No. 4260—Chrome Plated

Can be substituted in place of Snap in Strainer. Will fit all standard makes of sink strainers. Diameter 1-7/16".



Catch-All Strainer for Lavatory Plug

No. 4261—Chrome Plated

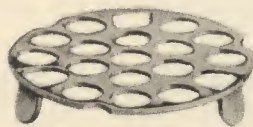
Can be used in all standard Basin P. O. Plugs.



Brass Sink Strainers

Brass, Chrome Plated

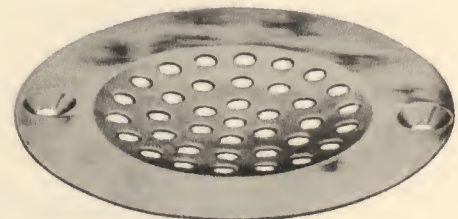
No.	Outside Diameter	Bolt Holes Center to Center
4303	4 5/8"	3 7/8"
4304	4 1/2"	3 5/8"



Snap in Sink Strainer

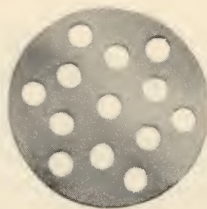
No. 4331—Chrome Plated

Will fit all standard makes of sink strainers. Diameter 1-7/16".



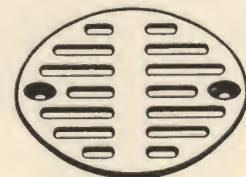
Iron Sink Strainers

No.	Outside Diameter	Bolt Holes Center to Center
4309	4 1/2"	3 5/8"
4310	4 5/8"	3 3/4"



Small Brass Strainer

No.	Finish	Diameter
4333	Chrome Plated	1 1/2"
4335	Chrome Plated	2"



Urinal Strainer

No. 4338—Chrome Plated

In 14 gauge brass. 3 1/2" diameter. Counter-sunk holes 2-13/16" center.

No. 4339—Plain Brass



P. O. Plug Washer

No. 4336—Brass, Chrome Plated



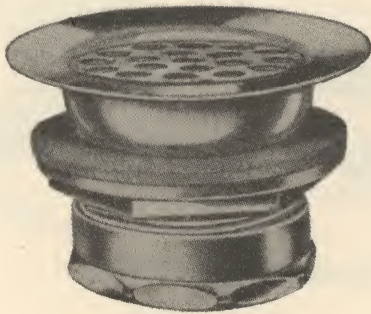
Woodward Wanger Co.



Sink Strainer

CHROME PLATED TOP

No. 4265



Strainer less tail piece. Furnished with Satin Chrome Coupling Nut.

Will fit 1 $\frac{1}{4}$ " and 1 $\frac{1}{2}$ " Tail Piece.

Diameter of flange 3". Made to fit sinks with 2" to 2 $\frac{1}{2}$ " outlets.

Furnished with leather Washer and lock Nut.

Tail Pieces for All Sink Strainers and Tray Plugs

CHROME PLATED

Size 1 $\frac{1}{4}$ "

No.	Size	Length	Gauge
4271C.....	1 $\frac{1}{4}$	6"	22
4272C.....	1 $\frac{1}{4}$	6"	17
4273C.....	1 $\frac{1}{4}$	8"	17
4274C.....	1 $\frac{1}{4}$	8"	22
4275C.....	1 $\frac{1}{4}$	12"	22

CHROME PLATED

Size 1 $\frac{1}{2}$ "

No.	Size	Length	Gauge
4277C.....	1 $\frac{1}{2}$	6"	22
4278C.....	1 $\frac{1}{2}$	6"	17
4279C.....	1 $\frac{1}{2}$	8"	17
4280C.....	1 $\frac{1}{2}$	8"	22
4281C.....	1 $\frac{1}{2}$	12"	22



4271-4275



4277-4281

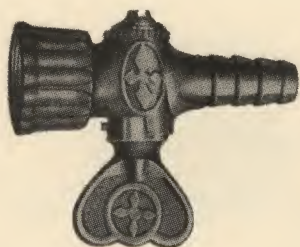


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Gas Fittings

— BRASS —



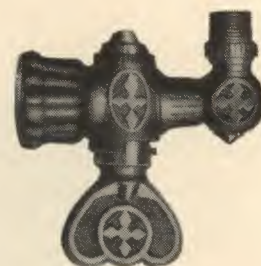
Hose Cocks

No.	Size
4426	1/4" Female
4427	3/8" Female
4428	1/2" Female
4429	3/4" Female



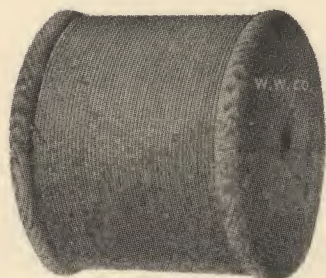
Independent Cocks

No.	Size
4437	3/8"



"L" Burner Cocks

No.	Size
4431	1/4"
4432	3/8"
4433	1/2"



Copper Wire

Soft Copper Wire for Plumbers. In 5 lb. Spools

Number	4448	4449	4449 1/2
Gauge	12	14	16

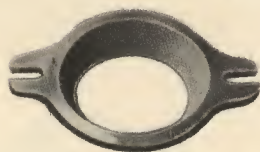
Gas Fitter's Cement

No. 4447per pound



No. 4447

Sink Collars

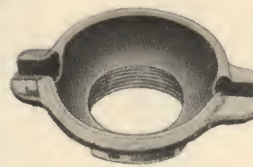


No. 4345

Cast Iron Sink Collars

REGULAR

No.	Description
4345	Plain Iron



Nos. 4350-4351

Cast Iron Sink Collars

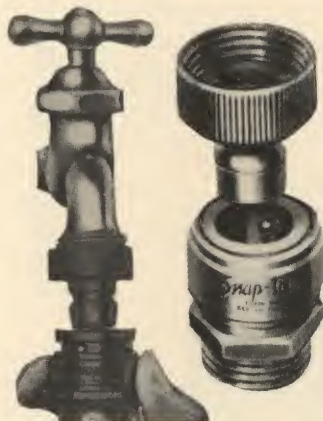
No.	Tapped	Description
4350	1 1/4 in. I. P.	Plain Iron
4351	1 1/2 in. I. P.	Plain Iron



Woodward Wanger Co.



Hose Fittings



No. 4390

Two-piece unit consisting of Snap-Tite coupler and nipple for faucet.

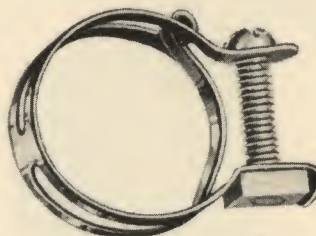
No. 4391

Nipple only for end of faucet, for those who wish to make extra connections or want to use hose on more than one faucet.

Garden or Laundry Hose Coupler

Just snap it on or off.

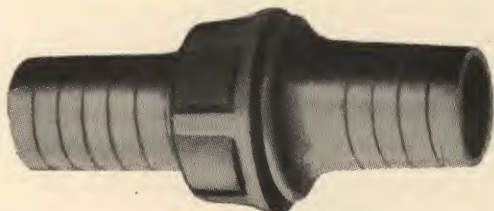
Galvanized Hose Clamps For 3-Ply Hose



Nos. 4363-4365

No. 4363	Size	1/2"
No. 4364	Size	5/8"
No. 4365	Size	3/4"

Brass Hose Couplings



Nos. 4377-4378

No.	Size
4377	1/2"
4378	3/4"

Female Parts Only

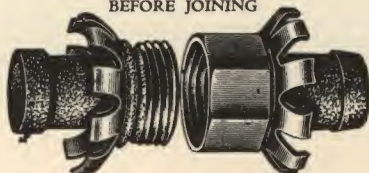


Nos. 4379-4380

No.	Size
4379	1/2"
4380	3/4"

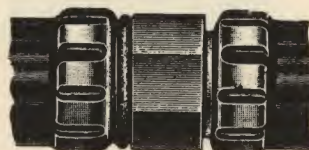
Clincher Hose Couplings

BEFORE JOINING



No.	Size
4381	1/2"
4382	3/4"
4383	5/8"

AFTER JOINING



Clincher Hose Mender

BEFORE JOINING



No.	Size
4387	1/2"
4388	3/4"
4389	5/8"

AFTER JOINING





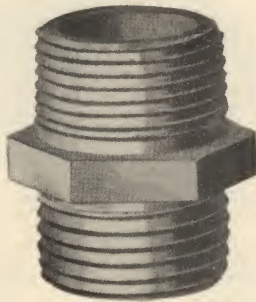
Woodward Wanger Co.



Hose Fittings

Brass Hose Nipples

Male



Nos. 4397-4398

No.	Male Hose Thread	Female I. P. Thread
4397	3/4 in.	1/2 in.
4398	3/4 in.	3/4 in.

Male and Female



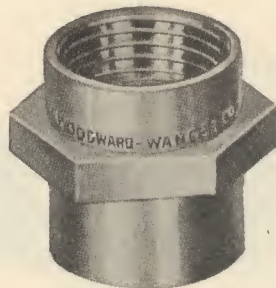
Nos. 4399-4400

No.	Male Hose Thread	Female I. P. Thread
4399	3/4 in.	1/2 in.
4400	3/4 in.	3/4 in.

Male Hose Nipples have Hose Thread on one end and Iron Pipe Thread on the other.
Male and Female Hose Nipples have Hose Thread on Male end and are tapped Iron Pipe Thread on the Female end.

Double Female Hose Nipples are Tapped Hose Thread on one end and I. P. Thread on the other.

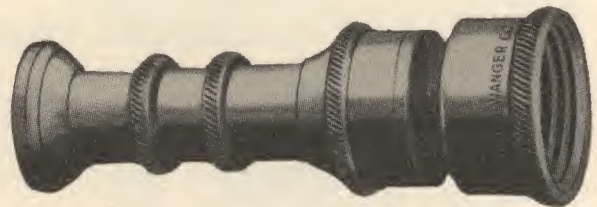
Double Female



Nos. 4401-4402

No.	Hose Thread	I. P. Thread
4401	3/4"	1/2"
4402	3/4"	3/4"

Hose Nozzle



No. 4410

Sturdily built of Cast Brass. The Discharge Openings in the Stem have a clear, Full Waterway. No Drip. No Back Spray. Quickly adjusted, to produce various sprays.

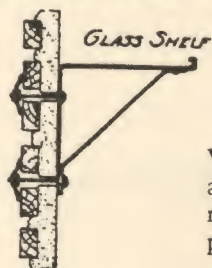
No. 4410 3/4"



Woodward Wanger Co.



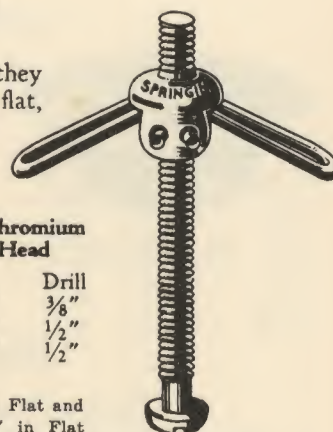
PLASTER ON WOOD LATH



Spring-In Toggle Bolts

CADMIUM PLATED—RUST PROOF

Wings fold down to push through opening. As soon as they are through the hole they spring open. Made with flat, round or mushroom head. Brass screws with chromium-plated heads supplied only with round heads.



PLASTER
ON METAL LATH

Cadmium Plated

No.	Diam. & Length of Screw	Drill Required
4480	$\frac{1}{8}$ x 3"	$\frac{1}{8}$ "
4481	$\frac{1}{8}$ x 4"	$\frac{3}{8}$ "

In Flat and Mushroom Head Only

4482	$\frac{3}{16}$ x 3"	$\frac{1}{2}$ "
4483	$\frac{3}{16}$ x 4"	$\frac{1}{2}$ "

In Round and Flat Heads Only

4484	$\frac{1}{4}$ x 3"	$\frac{5}{8}$ "
4485	$\frac{1}{4}$ x 4"	$\frac{5}{8}$ "
4486	$\frac{1}{4}$ x 6"	$\frac{5}{8}$ "

In Round and Flat Head

Brass Screw with Chromium Plated Round Head

No.	Size	Drill
4487	$\frac{1}{8}$ x 3"	$\frac{3}{8}$ "
4488	$\frac{1}{4}$ x 3"	$\frac{1}{2}$ "
4489	$\frac{3}{16}$ x 4"	$\frac{1}{2}$ "

Nos. 4488 and 4489 in Flat and Round head only. $\frac{1}{8}$ " in Flat and Mushroom heads only.

F—Flat Head
R—Round Head
M—Mushroom
Head



Pipe Straps and Hangers

Chrome Plated



No 4555

Brass Pipe Hangers

Solid— No.	Chrome For Pipe
4555	$\frac{1}{2}$ in. I. P.

Galvanized Iron



Nos. 4577-4579

Solid Single Ring Pipe Hangers

No.	For Pipe
4577	$\frac{3}{8}$ in.
4578	$\frac{1}{2}$ in.
4579	$\frac{3}{4}$ in.



Solid Double Ring Pipe Hangers

GALVANIZED IRON

No.	For Pipe
4565	$\frac{1}{2}$ in.
4566	$\frac{3}{4}$ in.



Woodward Wanger Co.



Floor Drains

For Showers, Urinal Stalls, etc.



Nos. 4580-4581

Brass, Chromium Plated. The strainer is removable by loosening two screws.

No.	Tapped	Diameter
4580	1 1/2" I.P.	4 1/2"
4581	2" I.P.	4 1/2"

Floor Drain

Chrome Plated Removable Top

For tile, mosaic floors, or wherever there is a cement base, or for solid cement floors. Tapped for 1 1/2" or 2" I.P. Drain. Top is heavy Brass Chrome Plated, as shown, and easily removed.

No.	Top of Strainer	Bottom Tapped
4582	4 1/2" dia.	1 1/2" I.P. Female
4583	4 1/2" dia.	2" I.P. Female



The Adjustable Threaded Drain Plug which receives the Strainer is slotted so that if, through the settling of a building or any other cause, water should work down and around between the Waste Plug and the cement, it will be caught by the lower embedded pan and directed through the slots into the Outlet, thereby saving the ceiling and contents of room below the drain.



Ventilation Caps

Cast Iron—Painted Black

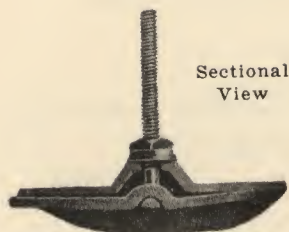
With Brass Set Screw

No. 4584for 4" Soil Pipe

Soil Pipe Menders

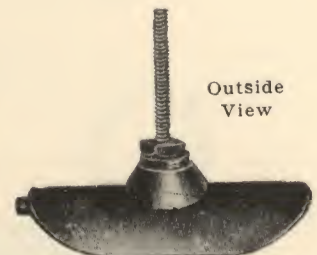
Brass Bolt and Iron Plate

Often saves cutting out a length of Soil Pipe in close places and can be used as a cleanout.



Sectional View

Number	4585.....	4586
Size	2"	4"



Outside View

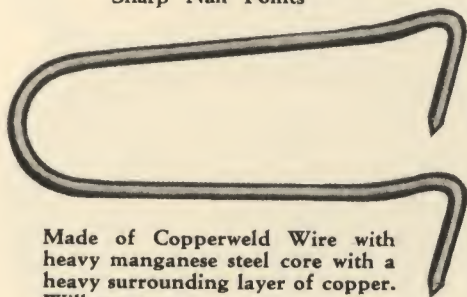


Woodward Wanger Co.



Reznor Wire Pipe Hooks

Sharp Nail Points



Made of Copperweld Wire with heavy manganese steel core with a heavy surrounding layer of copper. Will not rust.

Sharp Points

Reznor Wire Pipe Hooks

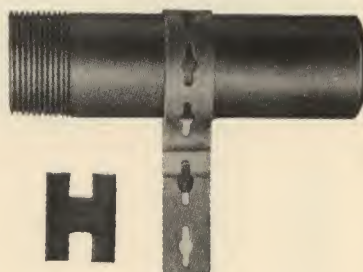
No.	For I. P. Size	Length	No.	For I. P. Size	Length
4611	 1/2 in.	4 in.	4625	 1 in.	8 in.
4613	 1/2 in.	6 in.	4626	 1 in.	10 in.
4615	 1/2 in.	8 in.	4629	 1 1/4 in.	6 in.
4616	 3/4 in.	4 in.	4631	 1 1/4 in.	8 in.
4618	 3/4 in.	6 in.	4634	 1 1/2 in.	6 in.
4620	 3/4 in.	8 in.	4636	 1 1/2 in.	8 in.
4623	 1 in.	6 in.	4637	 1 1/2 in.	10 in.
			4643	 2 in.	10 in.

Pipe and Cable Hanger

ADJUSTABLE TO FIT ANY SIZE PIPE

Made from special tempered soft steel; extremely strong yet easily twisted or bent by hand.

Can be installed without use of tools. Conveniently packed in box containing 12 yards of Hanger with Keys for fastening.



No.	Width	Thickness
4650.....	3/4 in.	No. 20 Gauge

Rustless Pipe Straps

Beaded



4653.....	1/2 in.
4654.....	3/4 in.



No. 4648

Chain Stay Washer

GALVANIZED

No.	For
4648.....	Chain Stays

Brass Name Plate

BLACK LETTERS

To designate the use of Stops and Wastes.

4649	Dia. 1 1/2", 3/16" Hole
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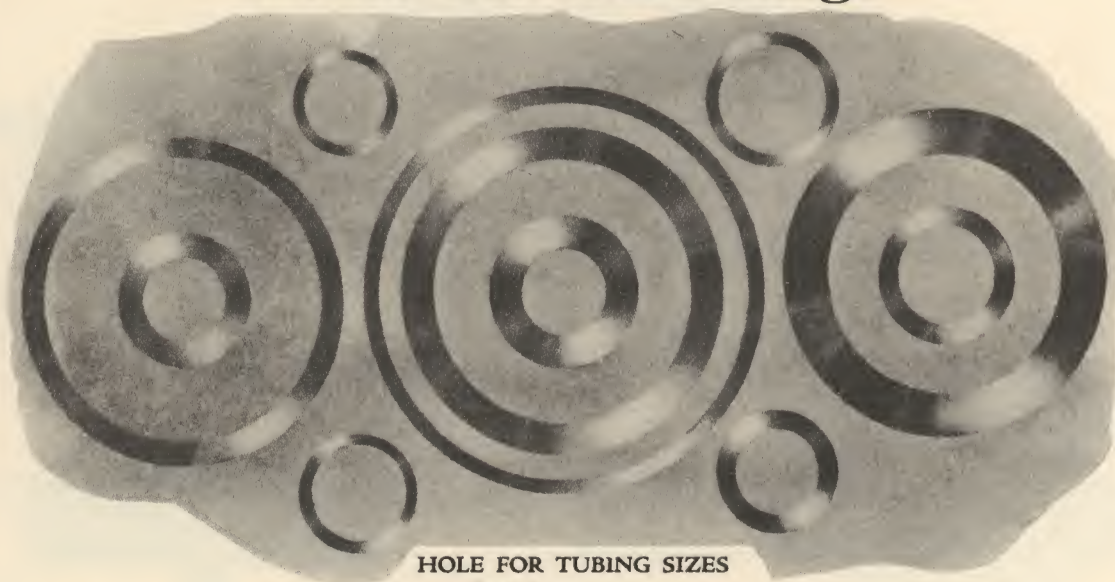




Woodward Wanger Co.



Brass Friction Rings



HOLE FOR TUBING SIZES

No.	Outside Diameter	To Slip Tube	To Fit Nut
4670.....	$\frac{1}{8}$ in.	$\frac{1}{8}$ in. O. D.	$\frac{3}{8}$ in. I. P. No. 4068
4671.....	$\frac{3}{16}$ in.	$\frac{7}{16}$ in. O. D.	$\frac{1}{2}$ in. I. P. No. 4069
4672.....	$\frac{1}{2}$ in.	$\frac{1}{2}$ in. O. D.	$\frac{1}{2}$ in. I. P. No. 4070
4673.....	$\frac{3}{4}$ in.	$\frac{7}{8}$ in. O. D.	$\frac{1}{2}$ in. I. P. No. 4071
4674.....	$1\frac{1}{2}$ in.	$1\frac{1}{4}$ in. O. D.	$1\frac{1}{4}$ x $1\frac{1}{4}$ in. No. 4054
4675.....	$1\frac{1}{2}$ in.	$1\frac{3}{8}$ in. O. D.	$1\frac{1}{4}$ x $1\frac{3}{8}$ in. No. 4055
4676.....	$1\frac{3}{4}$ in.	$1\frac{1}{4}$ in. O. D.	$1\frac{1}{2}$ x $1\frac{1}{4}$ in. No. 4056
4677.....	$1\frac{3}{4}$ in.	$1\frac{3}{8}$ in. O. D.	$1\frac{1}{2}$ x $1\frac{3}{8}$ in. No. 4057
4678.....	$1\frac{3}{4}$ in.	$1\frac{1}{2}$ in. O. D.	$1\frac{1}{2}$ x $1\frac{1}{2}$ in. No. 4058
4679.....	$1\frac{1}{8}$ in.	$\frac{3}{8}$ in. I. P.	$\frac{3}{4}$ x $\frac{3}{8}$ in. No. 4072

FOR BASIN FAUCET AND ODD THREAD NUTS

No.	Outside Diameter	To Slip Tube	For Use With
4688.....	$\frac{3}{16}$ in.	$\frac{1}{8}$ in.	Basin Faucet Nut for 6536 Connection
4689.....	$\frac{3}{16}$ in.	$\frac{1}{2}$ in.	Basin Faucet Nut
4690.....	$\frac{1}{8}$ in.	$\frac{1}{2}$ in.	Ideal Float Valve (Ball Cock) Shank
4691.....	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.	Ideal Float Valve (Ball Cock) Shank
4692.....	$2\frac{1}{8}$ in.	2 in.	Closet Elbow Nut
4693.....	$\frac{1}{8}$ in.	$\frac{3}{8}$ in. I. P.	Ball Cock Nut



ASSORTMENT BRASS FRICTION RINGS

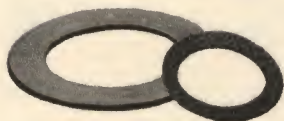
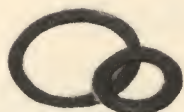
No. 4694.....100 Assorted Rings



Woodward Wanger Co.



with Friction Rings to Match



Washer No.	Uses	Friction Ring No.
1042		4670
1043		4672
1044		4673
1045		4679
1046		4678
1048		4670
1049		4672
1050		4671
1051		4673
1052		4679
1053		4689
1054		4693
1056		4674
1057		4674
1058		4676
1059		4674
1060		4677
1061		4678
1062		4678
1064		4692
1070		4678
1101		4670
1102		4689
1103		4673
1103-S		4693
1104		4672
1105		4693
1107		4688
1108		4672



Woodward Wanger Co.





Woodward Wanger Co.



Miscellaneous Heating

Extension Bar

Pipe Hanger



Made of the finest quality mild Steel, with holes $\frac{1}{2}$ " apart. Steel is soft, easy to work with and easy to cut with heavy shears or cold chisel. Be sure to specify Catalog Number and number of feet wanted.

Catalog Number	Width in Gauge	Size Hole	Center to Center of Hole	Feet per Standard Bundle
4703	$\frac{3}{4}$ x 18g	$\frac{1}{4}$ "	$\frac{1}{2}$ "	250
4703A	$\frac{3}{4}$ x 16g	$\frac{1}{4}$ "	$\frac{1}{2}$ "	250
4703B	$\frac{7}{8}$ x 16g	$\frac{1}{4}$ "	$\frac{1}{2}$ "	250
4703C	1 x 14g	$\frac{1}{4}$ "	$\frac{1}{2}$ "	250
4703D	$1\frac{1}{8}$ x 12g	$\frac{5}{16}$ "	$\frac{1}{2}$ "	250
4703E	$1\frac{1}{4}$ x 12g	$\frac{3}{8}$ "	$\frac{3}{4}$ "	100
4703F	$1\frac{1}{4}$ x $\frac{3}{16}$ "	$\frac{3}{8}$ "	$\frac{3}{4}$ "	100
4703G	$1\frac{1}{2}$ x $\frac{1}{4}$ "	$\frac{1}{2}$ "	1"	100

Steel Band Hanger and Flat End Lag Screw

A strong Steel Band for Hanging Pipe. Has two holes for adjustment.



No.	Diameter	Lag Screw
4705	1"	No. 1
4705A	$1\frac{1}{4}$ "	No. 1
4705B	$1\frac{1}{2}$ "	No. 1
4705C	2"	No. 2
4705D	$2\frac{1}{2}$ "	No. 2
4705E	3"	No. 2
4705F	4"	No. 2

No.	
4705G	—Lag Screw No. 1— $\frac{5}{16}$ " x 3"
4705H	—Lag Screw No. 2—2" x 3"

Candle Wicking



We sell only the best grade of this wicking, clean and uniform. Furnished either in Fine or Coarse strands.

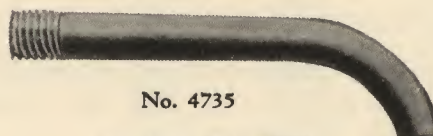
No.	Per Dozen Balls	Strand
4720		Coarse
4721		Fine

Asbestos Wicking



No.	Size of Ball
4724	 $\frac{1}{4}$ lb.

Brass Waste Tubes



No. 4735

For Stop and Wastes
Outside

No.	Diameter	Length	Threaded
4735	$\frac{1}{4}$ in.	$2\frac{1}{4}$ in.	$\frac{1}{4}$ x 26

Waste Plug For Stop and Wastes



No.	
No. 4730	4730.....Waste Plug



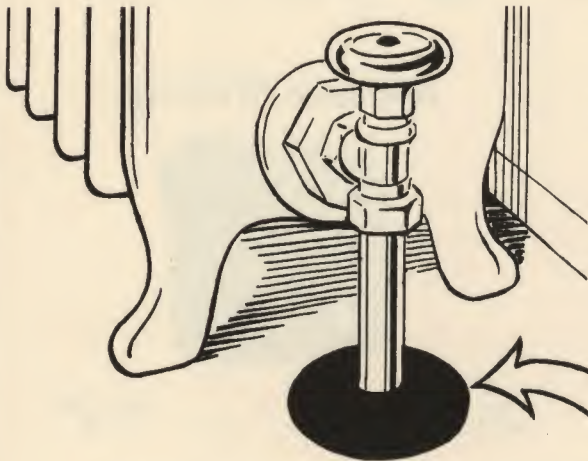
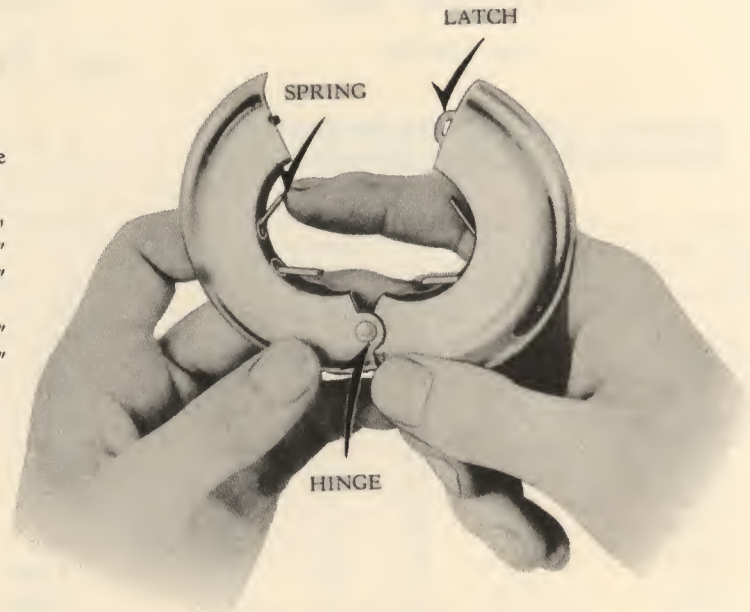
Woodward Wanger Co.



Floor and Ceiling Plates

BRASS—CHROME PLATED

No.	Iron Pipe Sizes
4740 (for 1/2" Copper Tubing)	3/8"
4741	1/2"
4742	3/4"
4743	1"
4744	1 1/4"
4745	1 1/2"
4746	2"



BAKELITE FLOOR & CEILING PLATES



Bakelite is the ideal material for floor and ceiling plates because any heat from pipes will not cause expansion and the opening of springs.

Because they will not rust or discolor. A damp cloth keeps them clean.

For this reason alone they are superior to metal plates. But there are other advantages. They will not peel, chip, rust, dent or discolor. They will not slide around on pipes. They grip tight and stay put.

No.	Size	No.	Size
4750	1/2"	4753	1 1/4"
4751	3/4"	4754	1 1/2"
4752	1"	4755	2"



Woodward Wanger Co.



Radiator Valves



No. 4760

Coin Lock Screw Pattern.

No. 4760 1/8"



No. 4763

Regular Loose Key Pattern

No.

4763.....

Size

1/8 in.



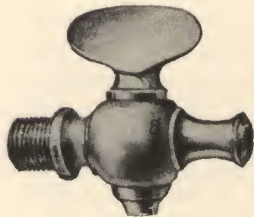
No. 4765

Extra Keys for No. 4763

No. 4765 Key

Brass Air Cock

Finished in Red Steam Metal, Tee Handles, Male Threads.



No.

4773.....

Size

1/8 in

4774.....

1/4 in

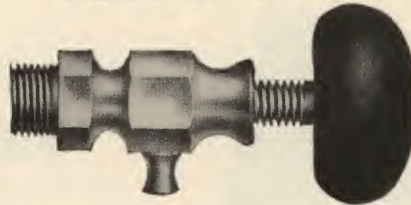
4775.....

3/8 in

4776.....

1/2 in.

Radiator Air Valve



No. 4766

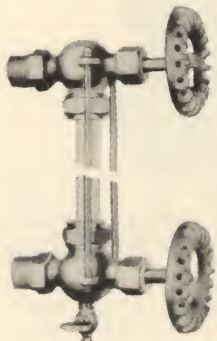
Regular Wood Wheel Pattern.

No. 4766 1/8"

Self-cleaning Water Gauges

With Iron Wheels

Substantially made and very serviceable. The three numbers (4795A, 4795C, 4795D) have bronze bodies. The balance have polished bodies.

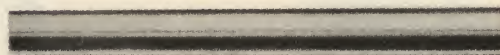


Bronzed Body

No.	Size Glass Inches	No. of Thread Guards	Pipe Inches
4795A	5/8x10	2	3/8
4795B	5/8x10	2	3/8
4795C	5/8x12	2	1/2
4795D	3/4x16	2	3/4
4795E	5/8x12	2	1/2
4795F	5/8x12	4	1/2
4795G	3/4x16	4	3/4

Scotch Gauge Glasses

200 Pounds Steam Pressure



Lengths not regular or shown will be charged at price of next larger size.

Length In.	1/2	5/8	3/4
8	4796	4797	4798
9	4796A	4797A	4798A
10	4796B	4797B	4798B
11	4796C	4797C	4798C
12	4796D	4797D	4798D
13	4796E	4797E	4798E
14	4796F	4797F	4798F
15	4796G	4797G	4798G
16	4796H	4797H	4798H
17	4796I	4797I	4798I
18	4796J	4797J	4798J
19	4796K	4797K	4798K
20	4796L	4797L	4798L



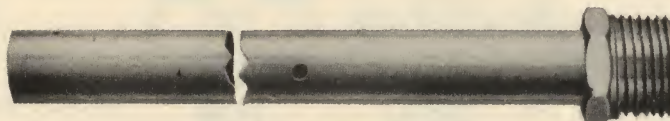
Woodward Wanger Co.



Copper Boiler Tubes

Copper Tube with Brass Nipple

Copper Tube



Brass Nipple

No. 4771

Made of $\frac{3}{8}$ " O.D. Seamless Tubing, equipped with a Brass Rod Nipple, threaded $\frac{1}{2}$ " I.P.S. securely assembled to the tube. Tubes have same inside diameter as the standard $\frac{1}{2}$ " I.P.S. and are installed more quickly and with more economy than either regular $\frac{1}{2}$ " I.P.S. Brass Pipe or $\frac{1}{2}$ " I.P.S. Galvanized Iron Pipe.

No. 4771 Copper Boiler Tube—54" Long— $\frac{1}{8}$ " Vent Hole

Radiator Air Valves



No. 4792

A moderately priced radiator valve of the sealed thermostatic float type. For venting radiator coils, etc. All brass construction with forged base. Strong and durable. Fully Nickel Plated.



No. 4793

An extremely well made valve of the sealed type with inside thermostatic float. Heavy all brass construction and fully Nickel Plated. Equal to many higher priced valves on the market.



No. 4795

A $\frac{3}{4}$ " Quick Vent valve for use at the end of the line. Used for venting mains, unit heaters, etc. Fully Nickel Plated.



Woodward Wanger Co.



Relief Valves



Brass House Heater Safety Valve

Equipped with testing Lever. A.S.M.E. Standard Specifications, set to relieve at 15 lbs. pressure. Maximum temperature degree, 300 F.

Tested under actual steam conditions. A.S.M.E. tested.

Operates to relieve at 15 lbs. pressure in steam House Heating Systems. Insert directly in the top of Boiler. Full directions with each Valve.

Catalog Number	3/4"	1"	1 1/4"	1 1/2"	2"
Sizes of Seat Diameter	4800	4800-A	4800-B	4800-C	4800-D

Diaphragm Pressure Relief Valve

1/2" I.P.S. Inlet and Outlet

This valve acts automatically to release any increase in water volume due to expansion under closed heating conditions. In addition it can be opened manually for testing or flushing, by the test lever.

No. 4801 — 1/2" I. P. S.—Cannot be set to relieve at higher pressure than that at which it is stamped. The limit setting is 160 lbs. (A. S. M. E. Standard.) If pressure setting is desired below that at which valve is marked, turn Hex adjusting Nut (right under testing lever), counter clockwise until water begins to drip out of the relief outlet. Then turn Hex adjusting nut clockwise until the dripping stops.

No. 4802 — 1/2" I. P. S.—This valve is standard for Hot Water Heating systems and is factory set to release at 30 pounds pressure per square inch, the maximum pressure setting of the valve.

No. 4803 —Same as No. 4850 but with Fusible Plug



Vacuum Breaker



Insert in Hot or Cold Water line close to domestic Hot Water Boiler, and it will break any vacuum. Recommended especially where Copper Boilers are used. Break the line and insert tee.

No. 4804 1/2" I. P.

Fusible Plugs



Fusible Plugs should be installed with the small end of the Banca tin exposed to the direct passage of the fire or gases. Do not use the plugs inside a steam drum, etc., where the temperature of the steam is used as a fusing agent.

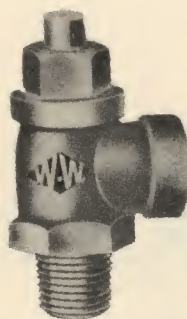
The Style	To Insert	Pressure to	3/8" I.P.T.	1/2" I.P.T.	3/4" I.P.T.	1" I.P.T.
Short	Inside	30 lbs.	4805	4805-A	4805-B	4805-C
Short	Outside	30 lbs.	4806	4806-A	4806-B	4806-C



Woodward Wanger Co.



Relief Valves



Combination Boiler Drain and Pressure Relief Valve

Made of rough Brass. Factory set for 125 lbs. Pressure Relief with built-in Vacuum Breaker device. Acts to relieve increases in pressure due to expansion of water in domestic Hot Water System. Vacuum acts to prevent collapse of Boiler in case of vacuum. Install in Cold Water return line and pipe to drain if desired.

- No. 4808— $\frac{1}{2}$ " I.P. Vacuum and Pressure
 No. 4808-A— $\frac{1}{2}$ " I.P. Pressure Only
 No. 4808-B— $\frac{1}{2}$ " I.P. Temperature and Pressure
 No. 4808-C— $\frac{1}{2}$ " Temperature, Pressure and Vacuum



Hextop Relief Valve with Adjustable Pressure

Can be regulated from 50 to 150 pounds. Cast Brass, $\frac{1}{2}$ " I.P. Install in Cold Water return line and pipe to drain.

- No. 4807— $\frac{1}{2}$ " I.P. as shown
 No. 4807-A— $\frac{1}{2}$ " I.P. Temperature and Pressure
 No. 4807-B— $\frac{1}{2}$ " I.P. Vacuum and Pressure
 No. 4807-C— $\frac{1}{2}$ " Temperature, Pressure and Vacuum

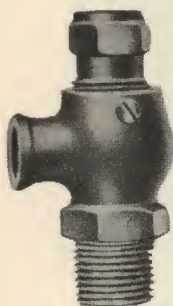


Temperature-Pressure Relief Valve

For the protection of Domestic Hot Water Tanks. Valves operate on patented Lovekin principle of the chemical fuse. Temperature Pressure, 175°; Set Pressure, 125.

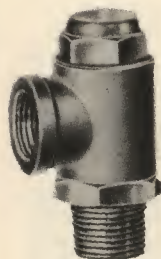
No. 4809 $\frac{3}{4}$ " I.P.

Spring Relief Valve Set at 75 lbs.



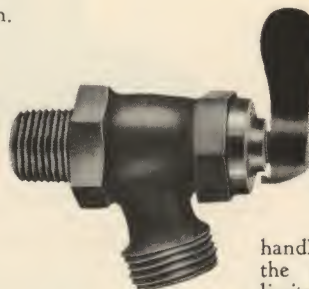
No. 4810—Has interior Phosphorus Bronze Spring, will not rust. Operates automatically when pressure becomes too great, drains the right amount of water to reduce the pressure to proper bounds, then automatically closes again. $\frac{1}{2}$ " only. Set to relieve at 75 lbs.

Spring Relief Valve Settings at 55, 85, 105 and 135 lbs.



No. 4811—Suitable for water and air only. All bronze pop type relief valve with bronze-nickel-chrome seat and renewable composition seat disc with stainless steel spring. Standard pressure setting 35 lbs., with adjustments for setting at 55, 85, 105 and 135 lbs. Instructions on package. $\frac{1}{2}$ " only.

Combination Boiler Drain and Pressure Relief Valve



Here we combine two essential Valves in one unit. Valve body is provided with a valve seat and hose connection outlet, much the same as an ordinary boiler drain cock. Valve is closed by spring action instead of a positive screw stem action. Indicator

handle is limited in travel so that in the shutoff position, pressure is limited to 150 lbs. per square inch. A lower pressure setting may be had by turning the indicator handle to 100 lbs. or 50 lbs. The pressure spring is fixed to the valve stem so that a positive opening is assured for quick draining of the system when desired.

- No. 4812. $\frac{1}{2}$ " I.P.S. Male Inlet x $\frac{3}{4}$ " Hose Outlet
 No. 4813. $\frac{3}{4}$ " I.P.S. Male Inlet x $\frac{3}{4}$ " Hose Outlet



Woodward Wanger Co.

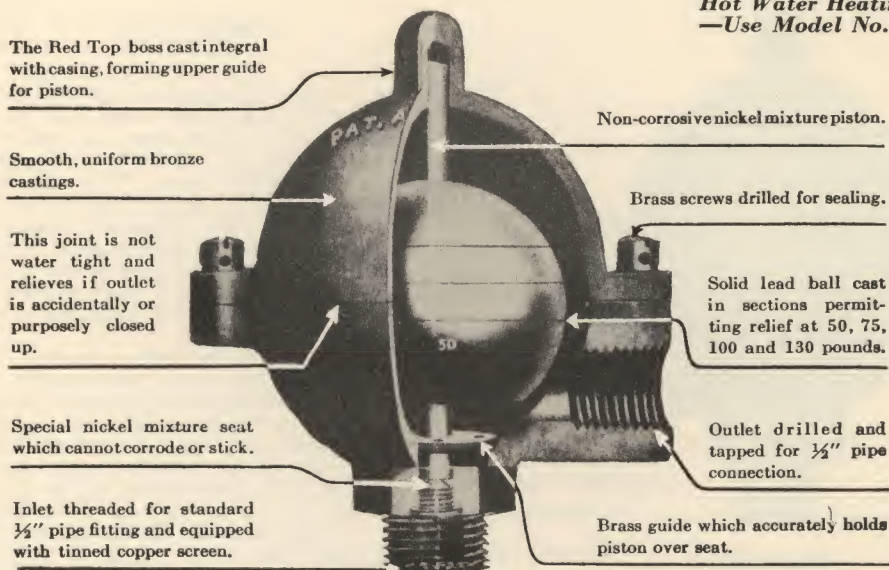


Red Top Relief Valve

For Domestic Hot Water System

Model No. 1

*Do not use this valve for
Hot Water Heating Systems
—Use Model No. 2 instead.*

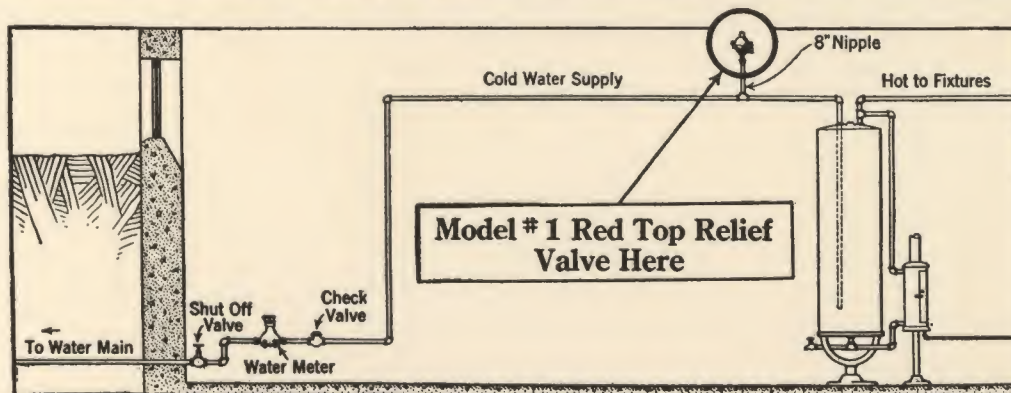


No. 4814

Model No. 1 Red Top Relief Valve is good insurance against exploding boilers. Look at the sectional view above and you will see why the Red Top is so dependable in action—made of non-corrosive metal throughout; no springs, levers, diaphragm, or other complicated parts. A special nickel mixture weighted piston, which operates on the gravity principle, is forced off the seat when pressure in system exceeds the pressure at which the valve is set.

Always responds in the emergency. No chance for this valve to jam, clog, stick, or otherwise get out of order. May be set to relieve at 50, 75, 100 and 130 pounds, simply by removing or adding sections of the lead ball which are plainly marked for pressures.

APPROVED—Model No. 1 Red Top Relief Valve is approved by the Underwriters Laboratories, Inc., and by State and Municipal Bureaus of Water and Boiler Inspection.



Always install in cold water line in a vertical position on horizontal line or section of pipe. Set valve at least 25 pounds higher than city water pressure.



Woodward Wanger Co.



Red Top Relief Valve

"Tank in Basement" Hot Water Heating System

Model No. 3



The Red Top "Tank-in-Basement" System is a decided step forward in hot water heating. Not only is the expansion tank placed in the basement, near the heater where it belongs, but the system is "closed", so to speak, affording better and more uniform heat. The water expansion is taken care of by an air cushion in the tank which is air-tight. The pressure created in the system causes a more rapid circulation of hot water, and water in returning to the boiler is of higher temperature than in the open system and is more quickly reheated, thus effecting a saving in fuel consumed.

Due to rapid circulation smaller piping may be used if desired, and a fair amount saved in cost. The only additional equipment required over the open tank system is the Red Top Relief Valve. The gauge and thermometer are the same; so is the tank which, however, must be air-tight. A tank of any manufacture may be used, but its size should be governed by the following table:

For use with Model No. 3 Red Top:

15 gal. Tank.....	up to 500 ft. Radiation
21 " "	500 to 800 ft. "
26 " "	800 to 1200 ft. "

Tank must be air-tight.

Note: From 1200 ft. to 2000 ft. Radiation use Model No. 2.



Woodward Wanger Co.





Woodward Wanger Co.



Chemicals

Pipe Joint Cement



W-W Pipe Joint Cement has a high grade metallic base, compounded with a blend of oxidizing oils, and forms a metal to metal contact, producing leak-proof joints. It will not shrink, crumble, crack or get hard in the can.

The ingredients stay in suspension, and will not settle and get hard in the bottom of the can. Always ready for use.

No. 4826 1 lb. Can No. 4827 5 lb. Can

Dry Pipe Joint Cement

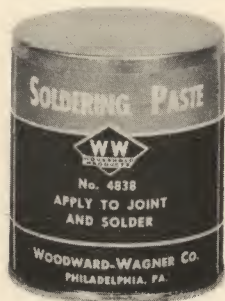
Powder Form



This cement is in powder form and only requires mixing with pure boiled Linseed Oil. You just mix as much as you need for the job at hand, thus eliminating waste. It produces a paste that is water and heat-proof, admits of expansion and contraction without injury to the joint, which may be broken after years of use without the slightest damage to pipe or coupling.

No. 4831 5 lb. Can No. 4833 50 lb. Can
No. 4832 10 lb. Can No. 4834 250 lb. Can

Solder Paste



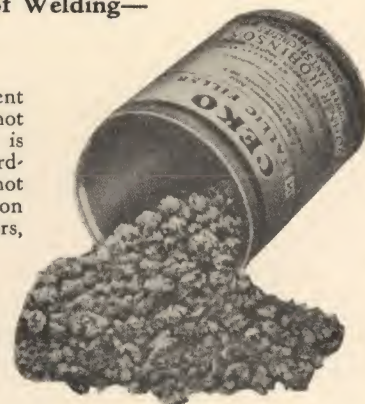
Quick and efficient on copper, brass, iron, steel or other metals. Apply to joint and solder.

No. 4838 4 oz.

"Ceko" Metallic Filler

—In Place of Welding—

Valuable for speedy and permanent repairs of cracked castings. It is not a paste, liquid or soft solder, it is a bronze alloy of considerable hardness and is worked plastic and not in the molten state. Can be used on the most difficult overhead repairs, on boiler sections, radiators, pipes, valves, etc. This compound adheres quickly and permanently to cast iron, and all other metals except aluminum. It fuses in place at about one-fifth the cost of a welding job, and requires no special tools or equipment for its application. Directions on every box.



No. 4836 1/4 lb.
No. 4837 1 lb.



Woodward Wanger Co.



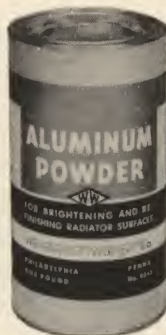
Bronze and Aluminum

— Powder and Liquid —

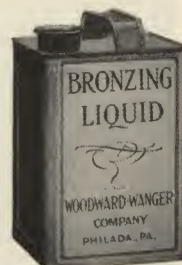


Bronze and Aluminum Powder

A highly satisfactory Bronze or Aluminum Powder. Easy to mix, good coverage, and will permit you to leave your new installation with a highly attractive and lasting finish. Will not crack or peel off and retains its bright lustre over a long period of time.



Bronzing Liquid

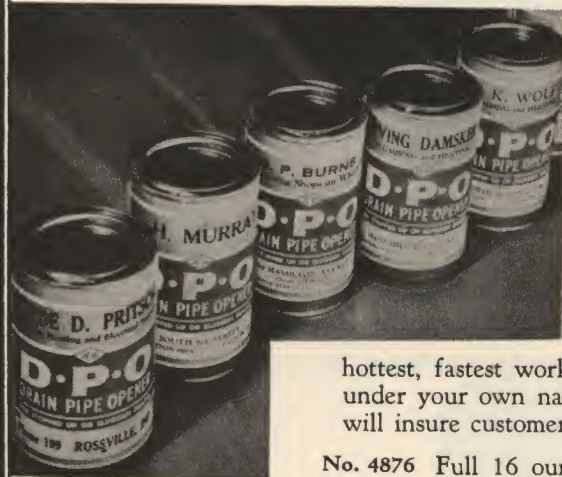


An absolutely reliable grade of Bronzing liquid.

One Pound Cans

No. 4842Pale Gold Bronze Powder
No. 4843Aluminum Powder

No. 4849 ...Gallon Cans Only



Your Own Label Drain Pipe Solvent

D.P.O.

Sell your own brand. Advertise your own business. Build up a steady repeat business by selling this finer drain pipe solvent put up with your own label. It is exactly the same product, as far as ingredients are concerned, as the famous Woodward-Wanger "DRAIN CLEAN" and every Plumber knows that's the

hottest, fastest working solvent on the market. This trade tested product under your own name will help you to build good will and prestige and will insure customers coming back to you when they want more.

No. 4876 Full 16 ounce can. Sold only in 72 and 144 can lots.

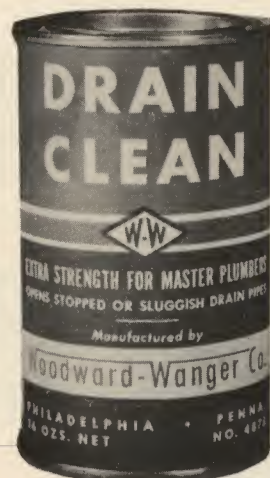
The Finest Drain Pipe Solvent Ever Made

DRAIN CLEAN

No. 4878—In Full 16 Ounces

Drain Clean works quicker because it's hotter. It contains (1) Granular Caustic Soda which has a less tendency to lump (2) Pure Aluminum chips to agitate and increase the heat (3) A vegetable compound to smother and greatly reduce the pungent choking fumes. It is truly "extra strength" solvent for the Master Plumber. Put up in full 16 ounce lithographed cans. Packed 24 cans to the case and sold in units of two dozen.

No. 4879—Same as above but without Vegetable Compound. Caustic Soda and Pure Aluminum Chips. Full 16-ounce can.

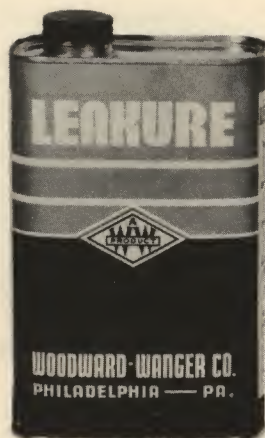




Woodward Wanger Co.



For Leaks and Cracks in Radiators and Boilers



Leakure

No. 4885

A liquid sold by Woodward-Wanger for many years. It is an effective leak remedy and will seal cracks and leaks in steam and hot water boilers, as well as sand holes, joint and thread leaks in radiator systems. Used also for new installations. Complete directions on can. Comes in quart cans. Packed 12 to a case.



Seals-Rite

No. 4886

A metallic Powder that forms a permanent patch at the sand hole, leak or break. Does the same job as LEAKURE only this is a powder. Stubbornly resists high pressure. Our best indorsement is the plumber's who buy it year after year. Sold in quart cans with directions. Packed 12 cans to a carton.

Klenz-Rite

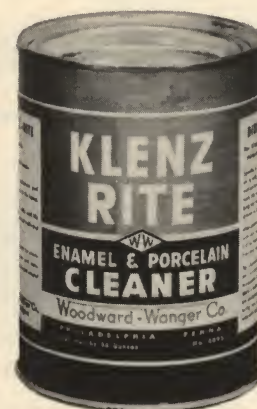
Porcelain Cleaning Powder
in Shaker Top Can

No. 4895

A top quality enamel and porcelain cleaner. Customers like it because it makes cleaning easy and will not scratch. No hard rubbing necessary. Entirely different from chain store products. Will not hurt the hands.

No. 4895 14 oz. Can

Packed 24 to a Case





Woodward Wanger Co.



Chemicals

China Handle Cement



No. 4898—A quick setting cement. Easy to use. Mix with water. Dries quickly and fastens spud permanently.

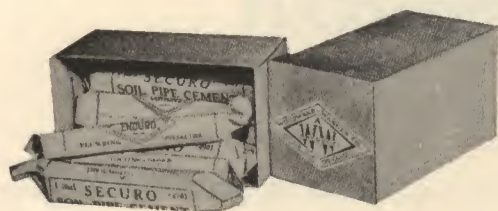
No. 4898 4 oz.

Plumber's Soil



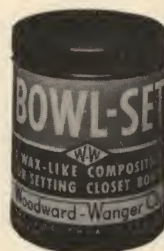
No. 4900—Stands excessive heat and will not wipe off. Will give entire satisfaction.

No. 4900 1/2 lb. Can



"Securo" Soil Pipe Cement

No. 4901 1 Doz. Sticks



Bowl Setting Wax

A smooth wax-like composition for setting closet bowls. Never hardens, cannot chip, crush or break. Watertight. Easy to form with the hands.

No. 4902 1/2 Pt. No. 4902B 1 Gal.
No. 4902A 1 Qt. No. 4902C 5 Gal.



Key Grease

A perfect Lubricant for ground key work.

No. 4903 4 oz.

Pure Tallow



A high grade Tallow for tinning and fluxing purposes. Will give perfect satisfaction.

No. 4905 1 lb.

For Removing Stains from Closet Bowls

Bowl Bleach

No. 4907

A perfect cleaning compound for toilet bowls. Will remove rust and water stains. It is fast, effective and efficient. Brings bowls quickly back to their original whiteness. In 22 ounce cans.





Woodward Wanger Co.

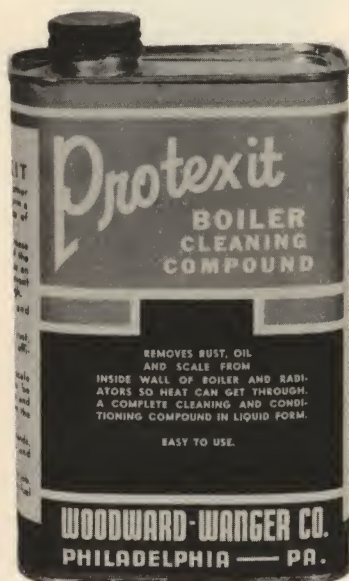


Chemicals



ODO-FLUSH CAKE

No. 4910—Keeps toilet bowls and closet tanks clean and sanitary besides killing all unpleasant odors. Hangs inside the tank with copper wire. Send off a fresh delicate odor every time toilet is flushed.



Boiler Cleaning and Conditioning Compound

PROTEXIT

No. 4915-L

A boiler cleaning liquid that will remove oil, dirt, sludge and grease from inside walls and surfaces of boiler and radiators so the heat can get through. Oil, dirt and grease clinging to the inside surfaces act as an insulation preventing all the heat from getting through. Show your customers how to get more heat with less fuel, by using PROTEXIT. Comes in quart cans, with full directions.

Waterproof Grease



For repairing faucets. Simply grease all working parts when rewashering or making any repairs. Prevents squeaking. Makes smooth, easy-working faucet.

No. 4916 4 oz. Can

Liquid Solder Flux



For use when soldering brass, galvanized iron, copper and lead.

No. 4920 4 oz.



Woodward Wanger Co.



Asbestos Furnace Cement



Stops Leaks in Water Tanks, Water Jackets, Pipes, Radiators, Etc.

Excellent for use in construction or repair of ranges, heaters or stoves. Cement will adhere quickly to all casting and metal work and will vitrify under intense heat. Acid proof. Will not crack. Sets quickly and hardens like iron. In one and five pound cans.

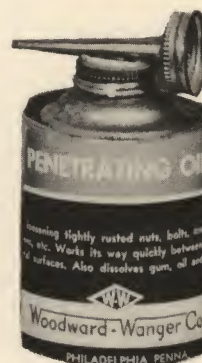
No. 4922 1 lb. Can

No. 4923 5 lb. Can

Penetrating Oil

A highly effective penetrating oil for loosening tightly rusted nuts, bolts, unions, etc. Works its way quickly between rusted metal surfaces.

No. 4925 8 oz. Can



"FREEZO"

easy cutting oil



Made from the finest grade of mineral oil and lard oil. The addition of lard oil increases the absorption of sulphur.

The sulphur is fused into the oil by boiling and the oil and sulphur together are brought up to 400° Fahrenheit. This makes an Oil-Sulphur solution with the sulphur held permanently in suspension.

No matter how long the can stands no sulphur will settle to the bottom as it is the integral part of the oil. It offers the maximum degree of coolness in thread cutting.

Use Freezo as you would any other cutting oil but less of it.

The heavy bodied film clings to the metal longer and reduces friction to a minimum.

No. 5000 One Gallon

No. 5001 5 Gallon Can

No. 5003 .. ½ Barrel (Steel Drum)
Containing 30 Gallons



Woodward Wanger Co.



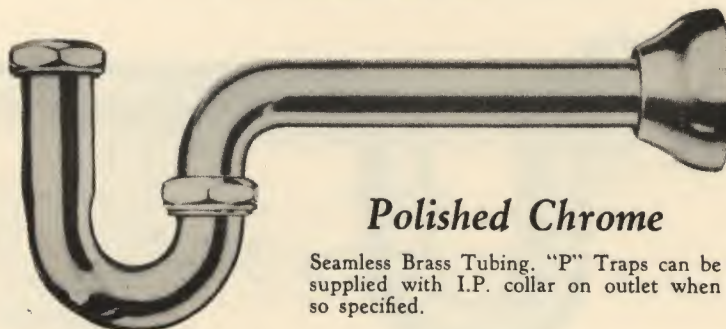


Woodward Wanger Co.



"P" TRAPS

No
Cleanout



Polished Chrome

Seamless Brass Tubing. "P" Traps can be supplied with I.P. collar on outlet when so specified.

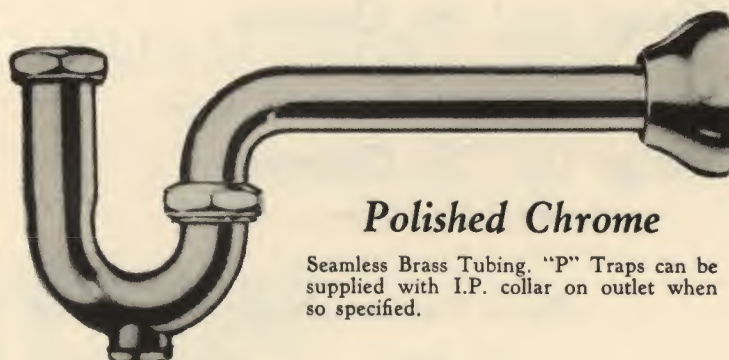
1 1/4" No Cleanout

Cat. No.	Gauge	Finish	Description
20-6000.....	20	Polished Chrome.....	Trap as illustrated
17-6001.....	17	Polished Chrome.....	Trap as illustrated

1 1/2" No Cleanout

Cat. No.	Gauge	Finish	Description
20-6005.....	20	Polished Chrome.....	Trap as illustrated
17-6006.....	17	Polished Chrome.....	Trap as illustrated

With Cleanout



Polished Chrome

Seamless Brass Tubing. "P" Traps can be supplied with I.P. collar on outlet when so specified.

1 1/4" With Cleanout

Cat. No.	Gauge	Finish	Description
20-6010.....	20	Polished Chrome.....	Trap as illustrated
17-6011.....	17	Polished Chrome.....	Trap as illustrated

1 1/2" With Cleanout

Cat. No.	Gauge	Finish	Description
20-6015.....	20	Polished Chrome.....	Trap as illustrated
17-6016.....	17	Polished Chrome.....	Trap as illustrated

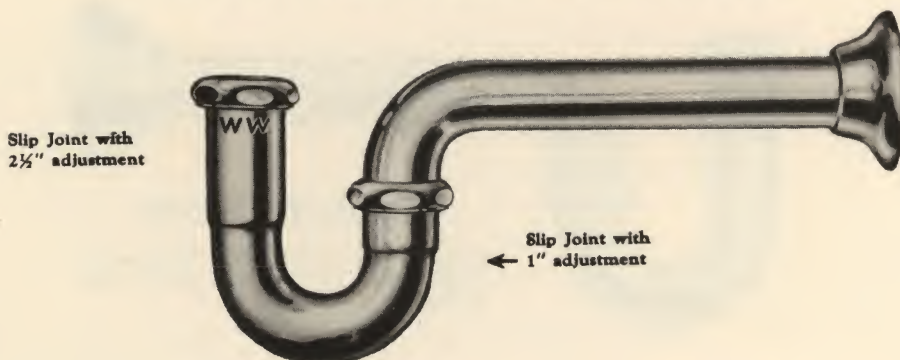
On 1 1/2" Traps, 1 1/2" Nuts will be furnished unless 1 1/4" Nuts are Specified.



Woodward Wanger Co.



DOUBLE SLIP "P" TRAP



20 Gauge 1 1/4" No Cleanout

No. 20-6040—Polished Chrome.....Trap as illustrated

17 Gauge 1 1/4" No Cleanout

No. 6043—Polished Chrome.....Trap as illustrated

20 Gauge 1 1/2" No Cleanout

No. 6046—Polished Chrome.....Trap as illustrated

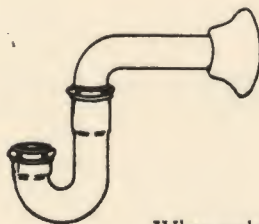
17 Gauge 1 1/2" No Cleanout

No. 6049—Polished Chrome.....Trap as illustrated

Above Trap can also be used this way.

SLIP JOINT

NO CLEANOUT



This is an illustration of how the above Double Slip Trap can also be used.

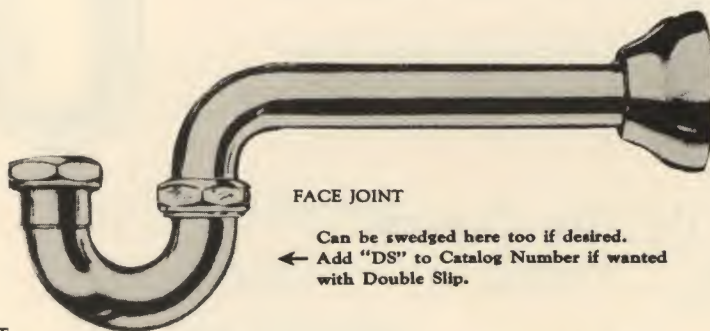
When ordering 1 1/2" traps always specify 1 1/4" or 1 1/2" inlet nuts. If not specified 1 1/2" nut will be furnished.



Woodward Wanger Co.



SHORT INLET "P" TRAP



NO CLEANOUT

1 1/4" No Cleanout

Cat No. Gauge Finish
20-6055 20 Polished Chrome

1 1/2" No Cleanout

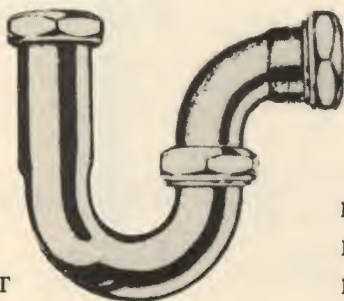
Cat No. Gauge Finish
20-6061 20 Polished Chrome

When ordering 1 1/2" traps always specify 1 1/4" or 1 1/2" inlet nuts.
If not specified 1 1/2" nut will be furnished.

REPLACEMENT TRAP

Satin Nickel and Chrome

When Traps are frozen or otherwise damaged, cut tube coming out of wall, make slip joint connection, and install new trap.



20 Gauge Only

No. 20-6070-SN	1 1/4"	20 Gauge, Satin Finish
No. 20-6070-C	1 1/4"	20 Gauge, Chrome Plated
No. 20-6071-SN	1 1/2"	20 Gauge, Satin Finish
No. 20-6071-C	1 1/2"	20 Gauge, Chrome Plated



Woodward Wanger Co.



"S" TRAPS

Polished Chrome Finish Seamless Brass Tubing
All 20½" Long

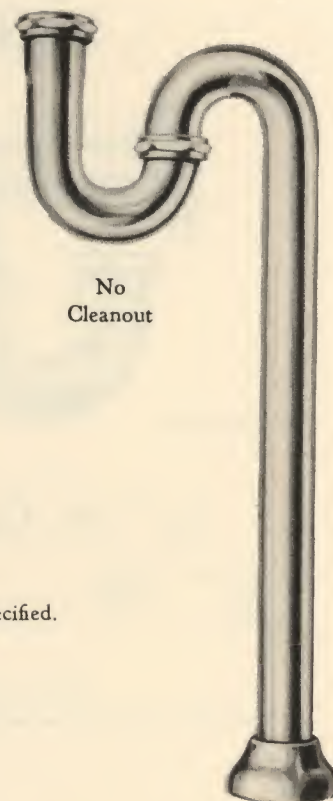
1¼" No Cleanout

No. 20-6100.....20 Gauge.....As illustrated

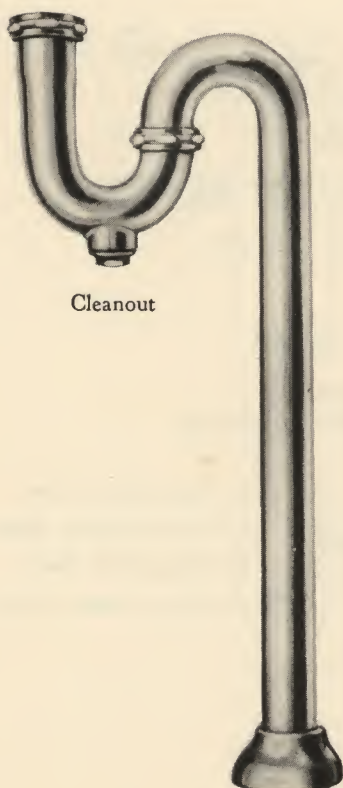
1½" No Cleanout

No. 17-6104.....17 Gauge.....As illustrated
No. 20-6105.....20 Gauge.....As illustrated

On 1½" Traps, 1½" Nuts will be furnished unless 1¼" Nuts are Specified.



No
Cleanout



Cleanout

"S" TRAPS

Polished Chrome Finish Seamless Brass Tubing
All 20½" Long

1¼" With Cleanout

No. 20-6115.....20 Gauge.....As illustrated
No. 17-6116.....17 Gauge.....As illustrated

1½" With Cleanout

No. 20-6120.....20 Gauge.....As illustrated
No. 17-6121.....17 Gauge.....As illustrated

On 1½" Traps, 1½" Nuts will be furnished unless 1¼" Nuts are Specified.



Woodward Wanger Co.



EXTRA LONG "S" TRAPS

Polished Chrome,
Extra Long, 26" or 5½" Longer Than Regular

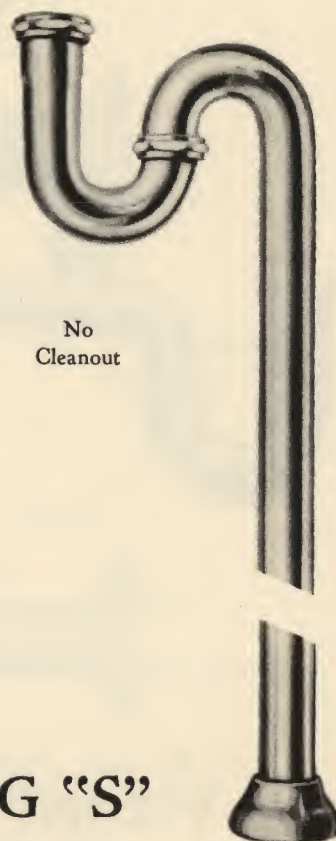
1¼" No Cleanout

L-20-6100.....20 Gauge.....As illustrated

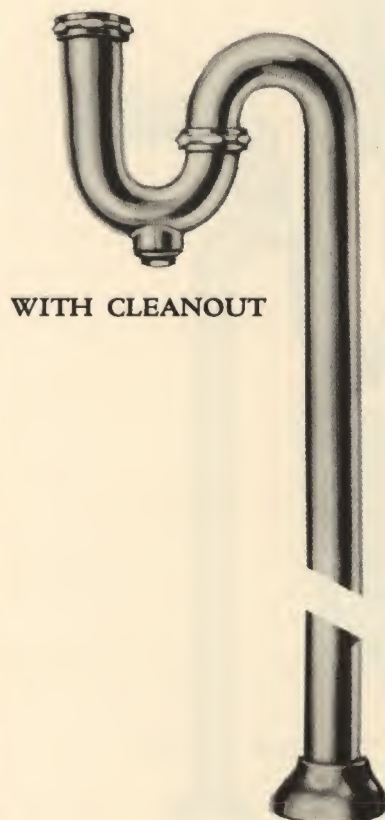
1½" No Cleanout

L-20-6105.....20 Gauge.....As illustrated

When ordering 1½" traps always specify 1¼" or 1½" inlet nuts.
If not specified 1½" nut will be furnished.



No
Cleanout



WITH CLEANOUT

EXTRA LONG "S" TRAPS

Extra Long, 26" or 5½" Longer Than Regular

Polished Chrome,

1¼" With Cleanout

L-20-6115.....20 Gauge.....As illustrated

L-17-6116.....17 Gauge.....As illustrated

1½" With Cleanout

L-20-6120.....20 Gauge.....As illustrated

L-17-6121.....17 Gauge.....As illustrated

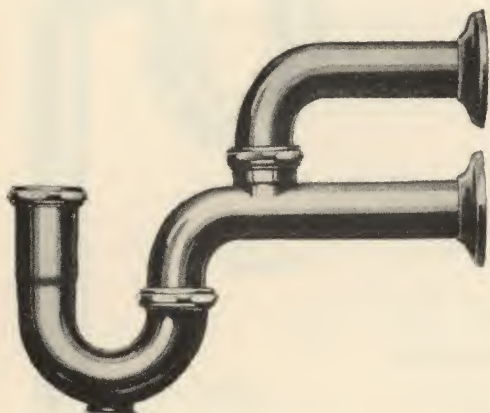
On 1½" Traps, 1½" Nuts will be furnished unless 1¼" Nuts are Specified.



Woodward Wanger Co.



Vented "P" Trap



Adjustable Seamless Bent Tube, With
and Without Cleanout

Chrome Plated Only

20 Gauge, With Cleanout

Polished Chrome

No. 6376-C 1 $\frac{1}{4}$ " 20 Gauge
No. 6377-C 1 $\frac{1}{2}$ " 20 Gauge

17 Gauge, With Cleanout

Polished Chrome

No. 6378-C 1 $\frac{1}{4}$ " 17 Gauge
No. 6379-C 1 $\frac{1}{4}$ " 17 Gauge

Without Cleanout

If wanted "without cleanout" add $\frac{1}{2}$ to catalog number.

On 1 $\frac{1}{2}$ " Traps, 1 $\frac{1}{2}$ " Nuts will be furnished unless 1 $\frac{1}{4}$ " Nuts are Specified.

Vented "S" Trap

Adjustable Seamless Bent Tube
With and Without Cleanout

Chrome Plated Only

20 Gauge— With Cleanout

Polished Chrome

No. 6380-C 1 $\frac{1}{4}$ " 20 Gauge
No. 6381-C 1 $\frac{1}{2}$ " 20 Gauge

17 Gauge— With Cleanout

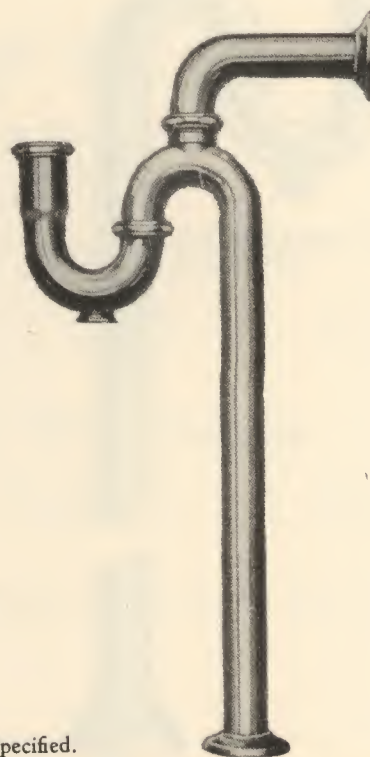
Polished Chrome

No. 6382 1 $\frac{1}{4}$ " 17 Gauge
No. 6383 1 $\frac{1}{2}$ " 17 Gauge

Without Cleanout

If wanted "without cleanout" add $\frac{1}{2}$ to catalog number.

On 1 $\frac{1}{2}$ " Traps, 1 $\frac{1}{2}$ " Nuts will be furnished unless 1 $\frac{1}{4}$ " Nuts are Specified.





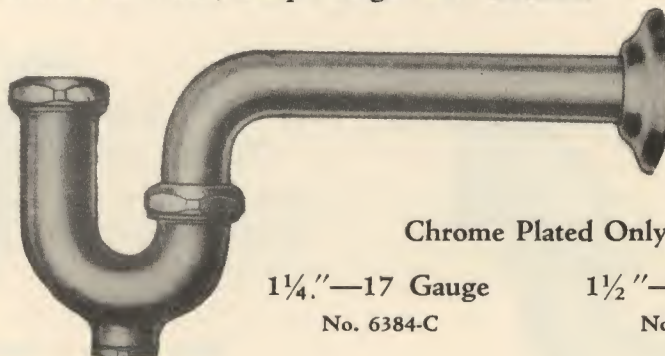
Woodward Wanger Co.



All Cast Body "P" Trap

Bent Wall Tube, Deep Flange with Cleanout

Adjustable



Chrome Plated Only

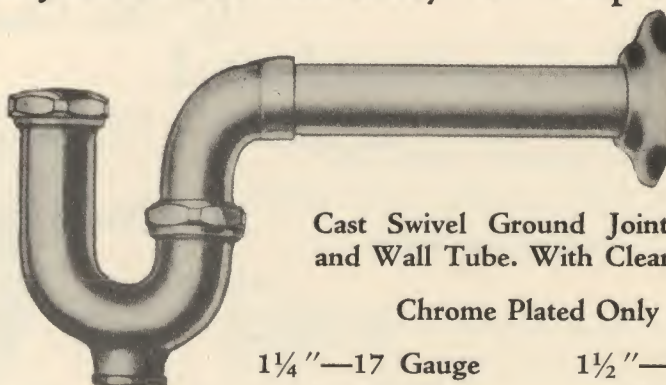
1 1/4" — 17 Gauge

No. 6384-C

1 1/2" — 17 Gauge

No. 6385-C

Adjustable All Cast Body "P" Trap



Cast Swivel Ground Joint Ell
and Wall Tube. With Cleanout.

Chrome Plated Only

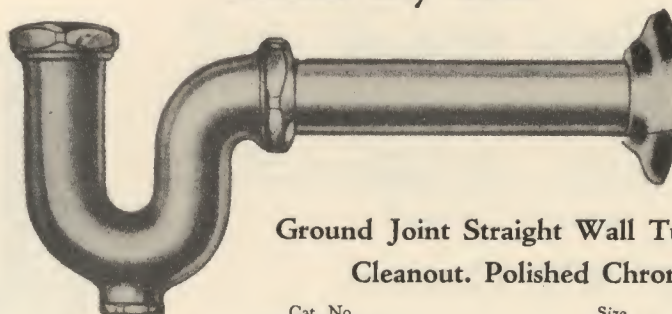
1 1/4" — 17 Gauge

No. 6386-C

1 1/2" — 17 Gauge

No. 6387-C

Kansas City Code



Ground Joint Straight Wall Tube, with
Cleanout. Polished Chrome.

All Cast Body "P" Trap

Cat. No.	Size	Gauge
No. 6388-C	1 1/4"	17 Gauge
No. 6389-C	1 1/2"	17 Gauge

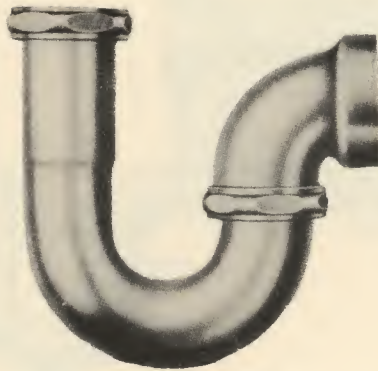
On 1 1/2" Traps, 1 1/2" Nuts will be furnished unless 1 1/4" Nuts are Specified.



Woodward Wanger Co.



SINK TRAPS



Bent "P" Trap. Wrought Brass Tubing, with Brass Elbow

Ground Joint, or Washer Joint. Ground Joint
Supplied Unless Order Reads Otherwise

Satin Finish or Polished
Chrome

1 $\frac{1}{4}$ " No Cleanout

Satin Finish

Polished Chrome

No. 20-6200-S.F. 20 Gauge

No. 20-6200-C. 20 Gauge

No. 17-6200-S.F. 17 Gauge

No. 17-6200-C. 17 Gauge

1 $\frac{1}{2}$ " No Cleanout

Satin Finish

Polished Chrome

No. 20-6205-S.F. 20 Gauge

No. 20-6205-C. 20 Gauge

No. 17-6205-S.F. 17 Gauge

No. 17-6205-C. 17 Gauge

2" No Cleanout

Satin Finish

Polished Chrome

No. 20-6215 20 Gauge

No. 20-6215-C. 20 Gauge

1 $\frac{1}{4}$ " With Cleanout

Satin Finish

Polished Chrome

No. 20-6208-S.F. 20 Gauge

No. 20-6208-C. 20 Gauge

No. 17-6208-S.F. 17 Gauge

No. 17-6208-C. 17 Gauge

1 $\frac{1}{2}$ " With Cleanout

Satin Finish

Polished Chrome

No. 20-6211-S.F. 20 Gauge

No. 20-6211-C. 20 Gauge

No. 17-6211-S.F. 17 Gauge

No. 17-6211-C. 17 Gauge

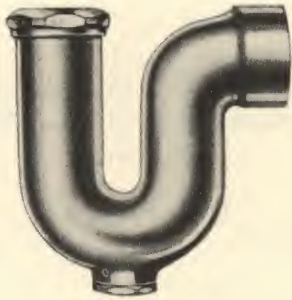




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NEW YORK REGULATION TRAP



CLEANOUT

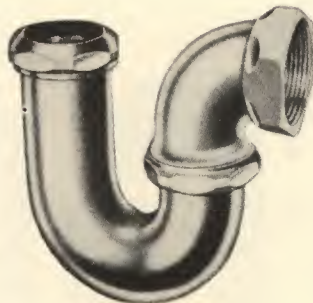
Cast Brass—With Cleanout
Polished Chrome

No. 6231— $1\frac{1}{4}$ " with $1\frac{1}{4}$ " S.P.S. Outlet

No. 6232— $1\frac{1}{2}$ " with $1\frac{1}{2}$ " S.P.S. Outlet, $1\frac{1}{4}$ " Inlet

No. 6233— $1\frac{1}{2}$ " with $1\frac{1}{2}$ " S.P.S. Outlet, $1\frac{1}{2}$ " Inlet

Los Angeles Code Trap



NO CLEANOUT

Cast Brass, Ground Joint
S.P.S. Swivel Elbow, S.P.S. Nuts,
Polished Chrome

No. 6236— $1\frac{1}{2}$ " x $1\frac{1}{2}$ " S.P.S. Outlet, $1\frac{1}{2}$ " Inlet

No. 6237— $1\frac{1}{2}$ " x $1\frac{1}{2}$ " S.P.S. Outlet, $1\frac{1}{4}$ " Inlet

Fort Worth Code Trap



CLEANOUT

Cast Brass, Ground Joint
S.P.S. Swivel Elbow, S.P.S. Nuts,
Polished Chrome

No. 6240— $1\frac{1}{2}$ " x $1\frac{1}{2}$ " S.P.S. Outlet, $1\frac{1}{2}$ " Inlet

No. 6241— $1\frac{1}{2}$ " x $1\frac{1}{2}$ " S.P.S. Outlet, $1\frac{1}{4}$ " Inlet

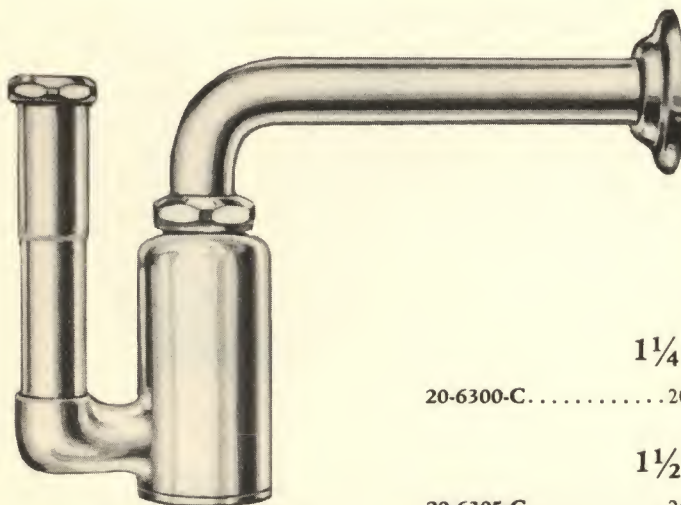


Woodward Wanger Co.



ANTI-SYPHON "P" TRAPS

Chrome Plated Only—Centrifugal Pattern



With Cast Body, Ground Joint,
Cast Nuts, Bent Wall Tube, With
Cleanout

Deep Flange

1 1/4 " with 5" Body

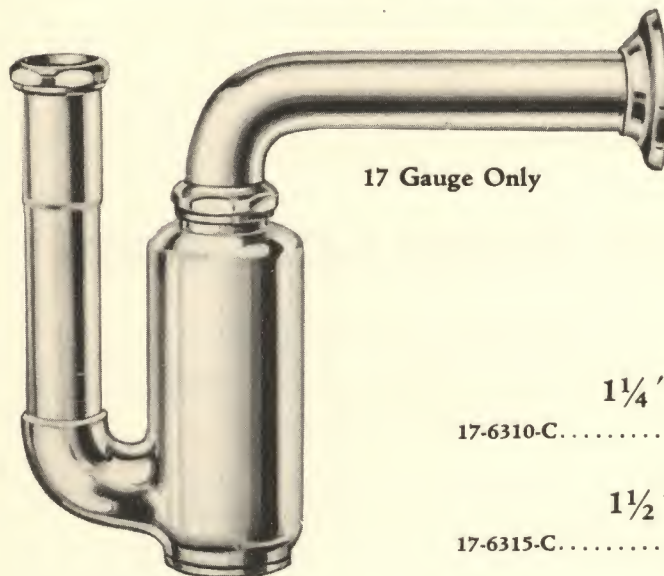
20-6300-C.....20 Gauge 17-6300-C.....17 Gauge

1 1/2 " with 5" Body

20-6305-C.....20 Gauge 17-6305.....17 Gauge

ANTI-SYPHON "P" TRAPS

Chrome Plated Only—Centrifugal Pattern



17 Gauge Only

With Cast Body, Ground Joint,
Cast Nuts, Bent Wall Tube, With
Cleanout

Deep Flange

1 1/4 " with 6" Body

17-6310-C.....17 Gauge

1 1/2 " with 6" Body

17-6315-C.....17 Gauge



Woodward Wanger Co.



ANTI-SYPHON "S" TRAPS

Cast Body, Ground Joint, Cast Nuts, Bent Floor
Tube, with Cleanout. Deep Flange.

Regular Length—20½ Inches.

1¼" with 5" Body

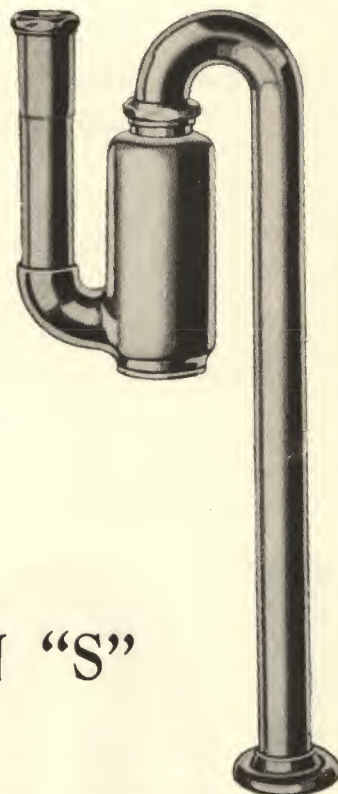
No. 20-6320.....20 Gauge

No. 17-6320.....17 Gauge

1½" with 5" Body

No. 20-6324.....20 Gauge

No. 17-6324.....17 Gauge



ANTI-SYPHON "S" TRAPS

Cast Body, Ground Joint, Cast Nuts, Bent Floor
Tube, with Cleanout. Deep Flange.

Regular Length—20½ Inches.

1¼" with 6" Body

No. 17-6330.....17 Gauge

1½" with 6" Body

No. 17-6335.....17 Gauge



17 Gauge Only



Woodward Wanger Co.



ANTI-SYPHON "S" TRAPS

EXTRA LONG—6" Longer Than Regular.

Centrifugal Pattern

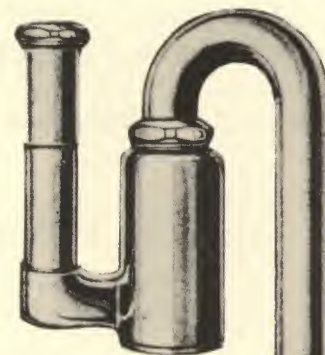
Cast Body, Ground Joint, Cast Nuts, Bent Floor
Tube, with Cleanout. Deep Flange.

1 $\frac{1}{4}$ " with 5" Body

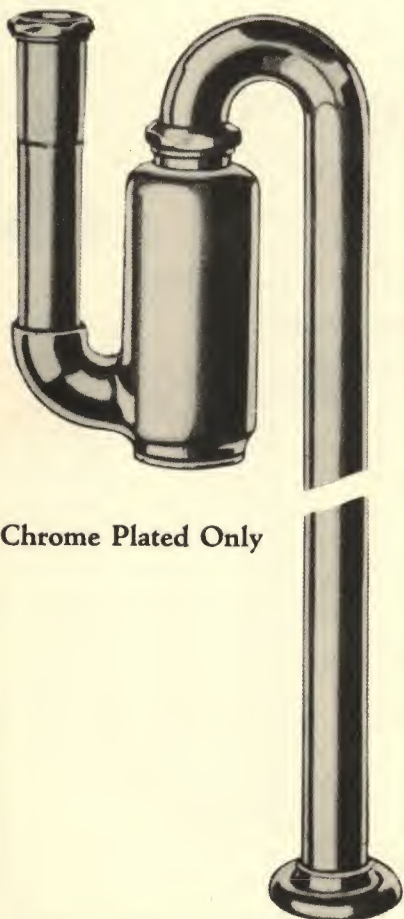
L-17-6355.....17 Gauge

1 $\frac{1}{2}$ " with 5" Body

L-20-6360-C.....20 Gauge L-17-6360-C.....17 Gauge



Chrome Plated



Chrome Plated Only

ANTI-SYPHON "S" TRAPS

Extra Long—6" Longer Than Regular

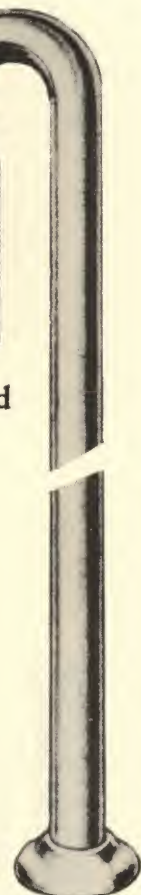
Chrome Plated Only—

1 $\frac{1}{2}$ " with 6" Body

17 Gauge Only

L-17-6370-C.....17 Gauge

Cast Body, Ground Joint, Cast Nuts, Bent Floor
Tube, with Cleanout. Deep Flange.



On 1 $\frac{1}{2}$ " Traps, 1 $\frac{1}{2}$ " Nuts will be furnished unless 1 $\frac{1}{4}$ " Nuts are Specified.

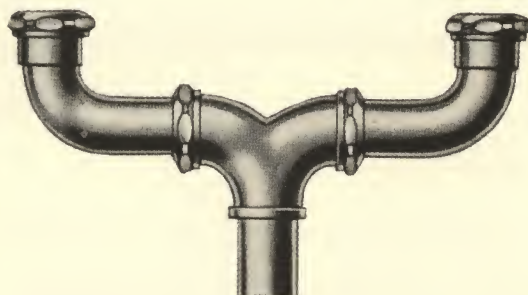


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Sink and Tray Wastes

For 1½" Traps



20 Gauge—1½"

Finish	16"	21"	27"	30"
Satin Chrome	6442-SF	6443-SF	6444-SF	6445-SF
Polished Chrome	6442-C	6443-C	6444-C	6445-C

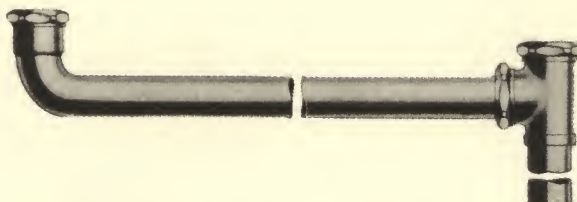
17 Gauge—1½"

Finish	16"	21"	27"	30"
Satin Chrome	6449-SF	6450-SF	6451-SF	6452-SF
Polished Chrome	6449-C	6450-C	6451-C	6452-C

Continuous Wastes

Satin or Polished Chrome

17 and 20 Gauge



20 Gauge—1½"

Finish	16"	21"	27"	30"
Satin Chrome	6455-SF	6456-SF	6457-SF	6458-SF
Polished Chrome	6455-C	6456-C	6457-C	6458-C

17 Gauge—1½"

Finish	16"	21"	27"	30"
Satin Chrome	6460-SF	6461-SF	6462-SF	6463-SF
Polished Chrome	6460-C	6461-C	6462-C	6463-C



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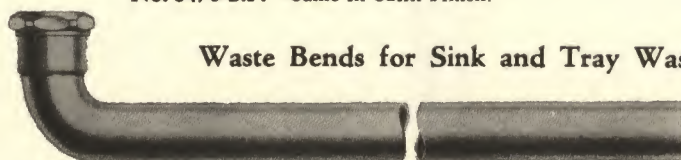


Parts for Sink and Tray Waste



No. 6470-C—Continuous Waste Extension with Cast Tee, 25" center to center. Polished Chrome.

No. 6470-S.F.—Same in Satin Finish.



Waste Bends for Sink and Tray Waste

6471	1 1/2" x 20 ga.	10"	6471D	1 1/2" x 20 ga.	20"
6471A	1 1/2" x 20 ga.	12"	6471E	1 1/2" x 20 ga.	24"
6471B	1 1/2" x 20 ga.	16"	6471F	1 1/2" x 20 ga.	29"



Cast Twin Elbow

No. 6475

1 1/2" x 1 1/2" x 2" Cast
Brass Tee Y with 2" Tail
Piece 4" long.

Straight Waste Tubes



Threaded One End

6472	1 1/2" x 20 ga.	8" long
6472A	1 1/2" x 20 ga.	12" long
6472B	1 1/2" x 20 ga.	19" long

"C" Signifies Polished Chrome
"S.F." Signifies Satin Finish

Cast Brass Tee



No. 6476

1 1/2" x 1 1/2" x 1 1/2" Slip Joint Cast
Tee.



Cast Brass Tee

No. 6474A

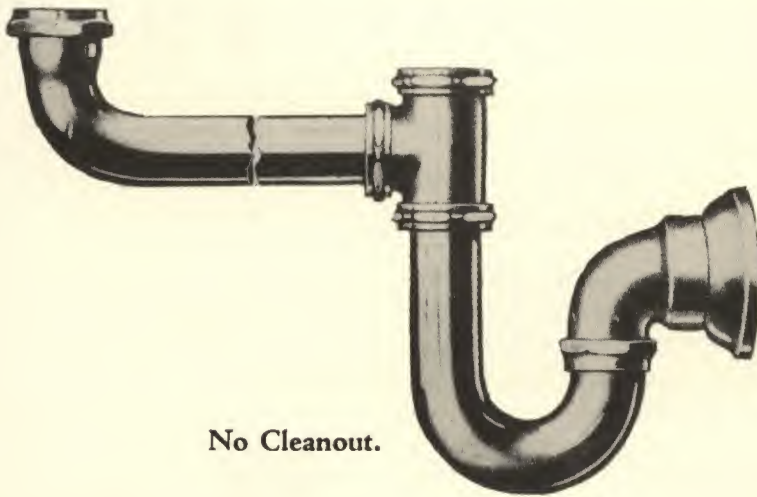
1 1/2" Twin Ell with 1 1/2" Tail
Piece 4" long.



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Sink and Wash Tray Combinations



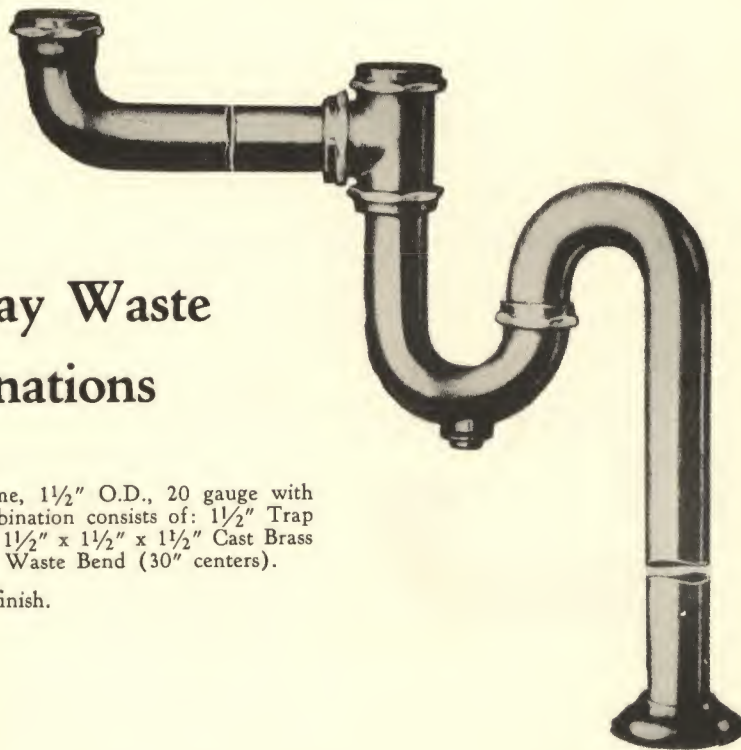
Cast Elbow
to Wall

No Cleanout.

No. 6466C Polished Chrome, $1\frac{1}{2}$ " O.D., 20 gauge, no Cleanout. Combination consists of: $1\frac{1}{2}$ " Trap less Cleanout, $1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $1\frac{1}{2}$ " Cast Brass Tee, $1\frac{1}{2}$ " Waste Bend (30" centers).

No. 6466S.F. Same in Satin finish.

Sink and Tray Waste Combinations



No. 6467C Polished Chrome, $1\frac{1}{2}$ " O.D., 20 gauge with Cleanout. Combination consists of: $1\frac{1}{2}$ " Trap with Cleanout, $1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $1\frac{1}{2}$ " Cast Brass Tee, and $1\frac{1}{2}$ " Waste Bend (30" centers).

No. 6467S.F. Same in Satin finish.



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Bath Waste and Overflow

For Exposed Work

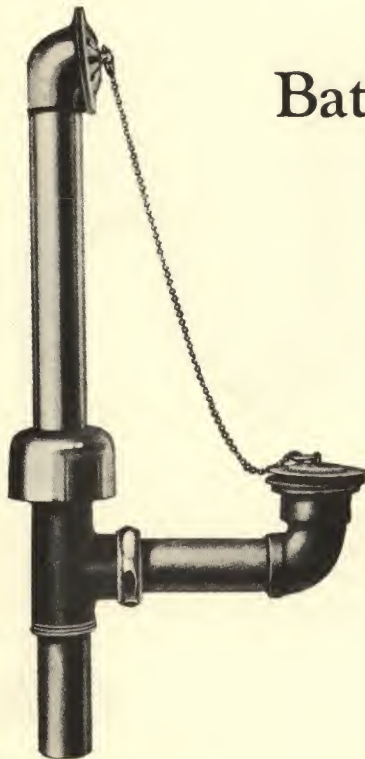
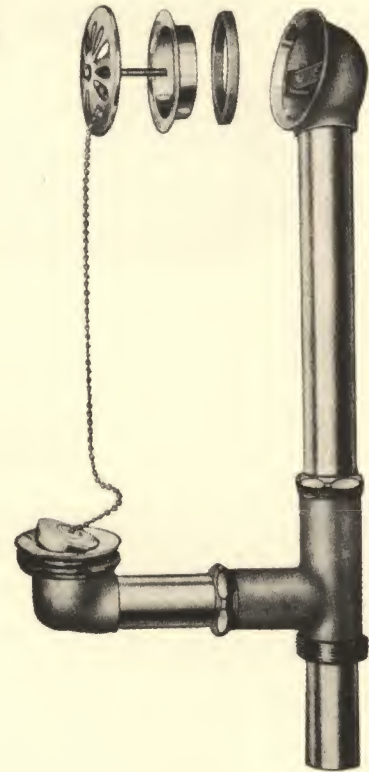
Size $1\frac{3}{8}$ " O.D.— 17 Gauge
and
22 Gauge

Patented Head to fit any pitch of Tub.

For Tiled-In tubs. Polished Overflow tube, lead washers. Cast Bottom strainer and wrought overflow strainer. Cast top and bottom elbows, cast tee and nuts with Bead Chrome chain and white rubber stopper. Furnished with Box Flange.

No. 6477—17 Gauge as described with polished chrome exposed parts.

No. 6478—22 Gauge.



Bath Waste and Overflow

Bath Waste and Overflow

For Concealed Work

Size $1\frac{1}{2}$ " O.D.—17 Gauge

Patented Head to fit any pitch of Tub.

Furnished with cast overflow and waste elbows. Cast tee, threaded $1\frac{1}{2}$ " S.P.S., O.D. on outlet end and screwed in tail piece. Heavy overflow and waste strainers, beveled lead washers, beaded chrome chain and white stopper.

No. 6479-C—17 Gauge. Polished chrome top and bottom strainer and chain. Other parts unfinished.



Woodward Wanger Co.



Bath Waste and Overflow

For Exposed Work

Size $1\frac{3}{8}$ " O.D.—
17 Gauge
and
22 Gauge

Patented Head to fit any pitch of Tub.

Furnished with cast overflow and waste elbows, cast tee, heavy overflow and waste strainers, saw tooth flange, chrome bead chain and solid white rubber stopper.

17 Gauge

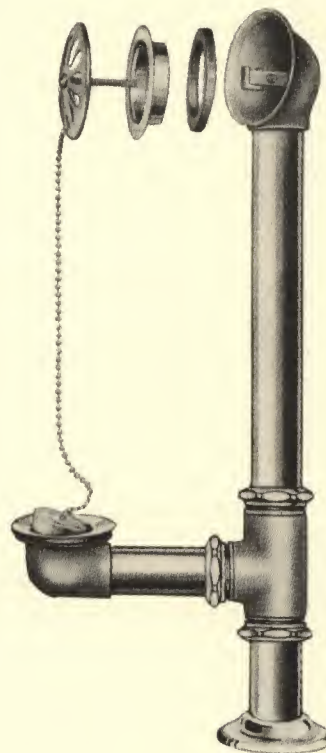
No. 6480-SF—Satin Finish.

No. 6480-C—Polished Chrome.

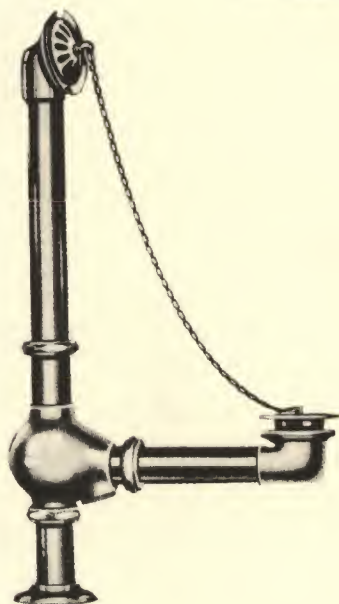
22 Gauge

No. 6481-SF—Satin Finish.

No. 6481-C—Polished Chrome.



No. 6480-F—Drain Shoe $1\frac{3}{8}$ " with strainer Washer and plug.



Waste and Overflow

Adjustable with Trap

Size $1\frac{3}{8}$ " O.D.—22 Gauge

Chrome Plated Only

No. 6482-C—Cast Top and Bottom Elbows, Cast Hexagon Nuts and Heavy Flanges. Provided with Adjustments to fit all tubs, and has deep water seal.



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Basin Waste

1 $\frac{1}{4}$ " tube, as illustrated, is Swedged on one end to 1 $\frac{1}{2}$ ". The 1 $\frac{1}{2}$ " tube is not.

1 $\frac{1}{4}$ " O.D. Tube

24" Long

Chrome Plated Only

6483-C — 22 Gauge, Chrome Plated, Less Plug.

6484-C — 22 Gauge, Chrome Plated, WITH Plug.

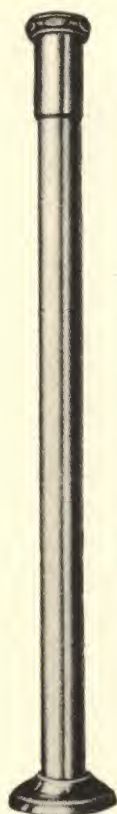
1 $\frac{1}{2}$ " O.D. Tube

24" Long

Chrome Plated Only

6485-C — 22 Gauge, Chrome Plated, Less Plug.

6486-C — 22 Gauge, Chrome Plated, WITH Plug.



Trap Offset

Chrome Plated Only

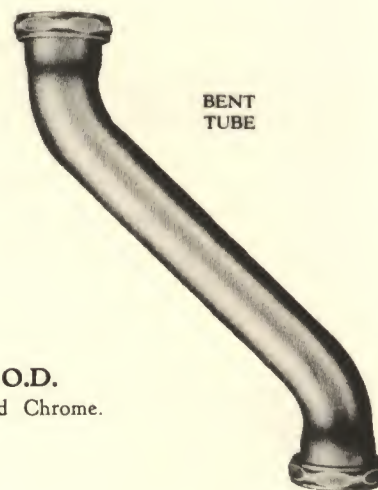
Height 11 $\frac{1}{2}$ ". Furnished with two (2) Cast Brass Nuts and Rubber Washers. Slip ends made 1 $\frac{1}{2}$ " Deep. Offset 7 $\frac{3}{8}$ ".

1 $\frac{1}{4}$ " O.D.

6487-C—Polished Chrome.

1 $\frac{1}{2}$ " O.D.

6488-C—Polished Chrome.

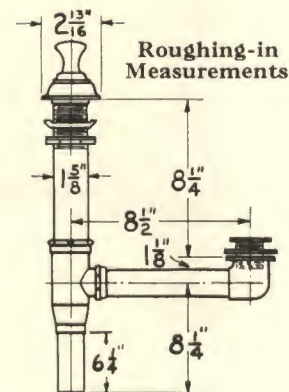
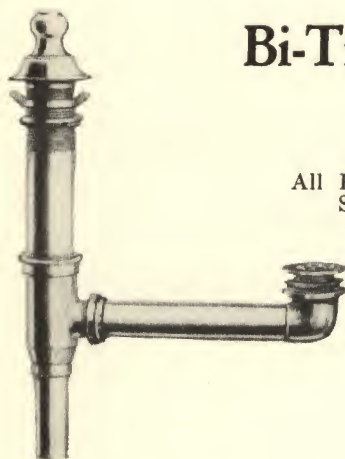


BENT
TUBE

Bi-Transit Basin Waste

No. 6489-C

All Polished Chrome above the Lavatory,
Satin Chrome below the Lavatory.



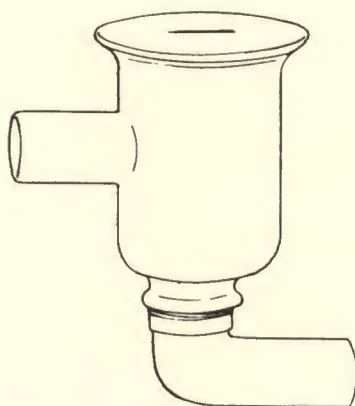


Woodward Wanger Co.

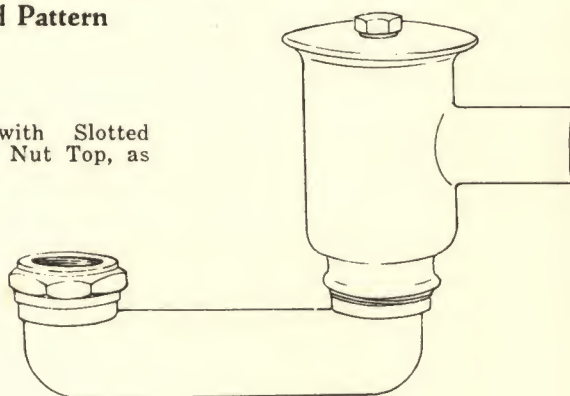


Cast Brass Bath Traps

Improved Pattern



Furnished with Slotted Top or Hex Nut Top, as desired.



With 4" Return Bend

No.	Inlet for	Outlet for
6490	1½" L.P.	1½" Lead Pipe
6490A	1½" I.P. Male	1½" I.P. Male
6490B	1½" I.P. Female	1½" I.P. Female

No.	Inlet for	Outlet for
6491	1½" Tube	1½" Lead Pipe
6491A	1½" Tube	1½" I.P. Male
6491B	1½" Tube	1½" I.P. Female

With 6" Return Bend

No.	Inlet for	Outlet for
6491D	1½" Tube	1½" Lead Pipe
6491E	1½" Tube	1½" I.P. Male
6491F	1½" Tube	1½" I.P. Female

Cast Brass Bath Traps

17 Gauge Chrome Inlet Tube

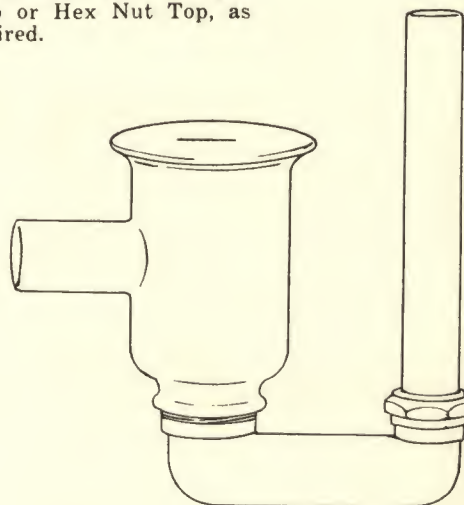
With 4" Return Bend

No.	Inlet Tube	Outlet for
6492	1¾" O.D.	1½" Lead Pipe
6492A	1½" O.D.	1½" Lead Pipe
6492B	1¾" O.D.	1½" I.P. Male
6492D	1½" O.D.	1½" I.P. Male
6492E	1¾" O.D.	1½" I.P. Female
6492F	1½" O.D.	1½" I.P. Female

With 6" Return Bend

No.	Inlet Tube	Outlet for
6492G	1¾" O.D.	1½" Lead Pipe
6492H	1½" O.D.	1½" Lead Pipe
6492J	1¾" O.D.	1½" I.P. Male
6492K	1½" O.D.	1½" I.P. Male
6492L	1¾" O.D.	1½" I.P. Female
6492M	1½" O.D.	1½" I.P. Female

Furnished with Slotted Top or Hex Nut Top, as desired.

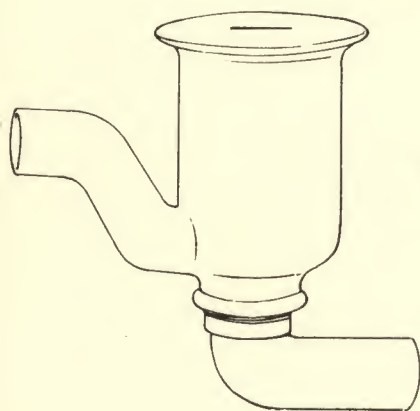




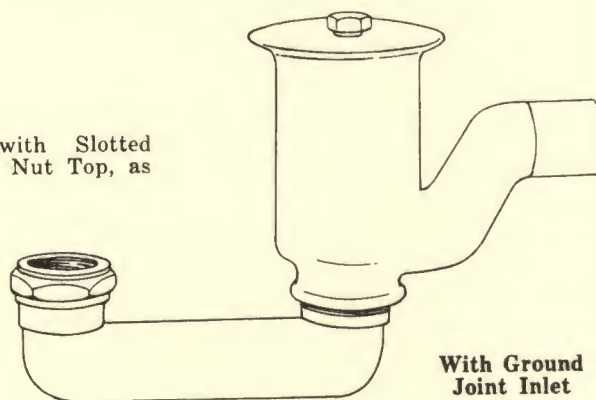
Woodward Wanger Co.



Cast Brass Bath Traps



Furnished with Slotted Top or Hex Nut Top, as desired.



With Ground Joint Inlet

No.	Inlet for	Outlet for
6493	1½" Lead Pipe	1½" Lead Pipe
6493A	1½" I.P. Male	1½" I.P. Male
6493B	1½" I.P. Female	1½" I.P. Female

With 4" Return Bend

No.	Inlet for	Outlet for
6494	1½" Tube	1½" Lead Pipe
6494A	1½" Tube	1½" I.P. Male
6494B	1½" Tube	1½" I.P. Female

With 6" Return Bend

No.	Inlet for	Outlet for
6494D	1½" Tube	1½" Lead Pipe
6494E	1½" Tube	1½" I.P. Male
6494F	1½" Tube	1½" I.P. Female

Cast Brass Bath Traps

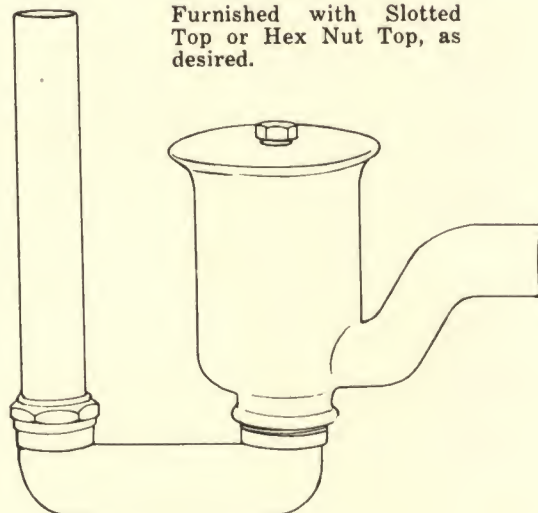
17 Gauge Chrome Inlet Tube

With 4" Return Bend

No.	Inlet Tube	Outlet for
6495	1¾" O.D.	1½" Lead Pipe
6495A	1½" O.D.	1½" Lead Pipe
6495B	1¾" O.D.	1½" I.P. Male
6495D	1½" O.D.	1½" I.P. Male
6495E	1¾" O.D.	1½" I.P. Female
6495F	1½" O.D.	1½" I.P. Female

With 6" Return Bend

No.	Inlet Tube	Outlet for
6495G	1¾" O.D.	1½" Lead Pipe
6495H	1½" O.D.	1½" Lead Pipe
6495J	1¾" O.D.	1½" I.P. Male
6495K	1½" O.D.	1½" I.P. Male
6495L	1¾" O.D.	1½" I.P. Female
6495M	1½" O.D.	1½" I.P. Female



Furnished with Slotted Top or Hex Nut Top, as desired.



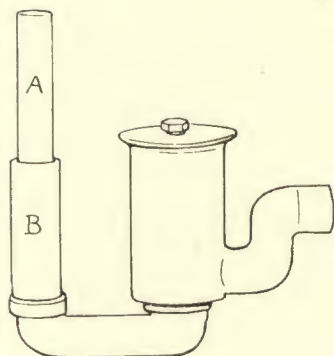
Woodward Wanger Co.



Bath Traps and Vent Tees

Cast Brass Bath Trap

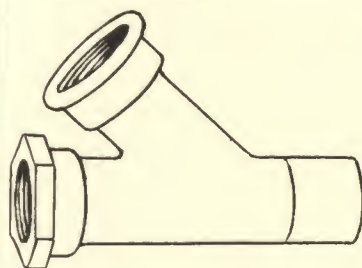
No. A6496½



Cast Brass Bath Trap with double tube inlet. Can be used for tub on feet as shown, or Built-In tub, by removing top piece of tubing.

A—Chrome Plated B—Smooth Brass

- No. A6496½ - As shown Male.
- No. B6496½ - As shown Female.
- No. C6496½ - Male without Top Tube.
- No. D6496½ - Female without Top Tube.
- No. E6496½ - Male without either Tube.
- No. F6496½ - Female without either Tube.

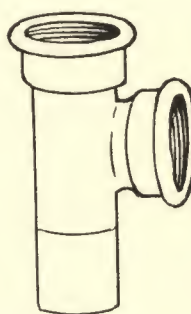


Vent Wye For Bath Trap

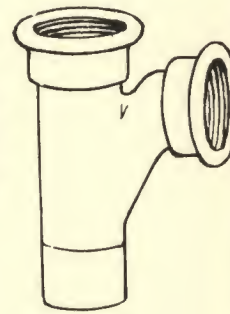
No. 6497½

1½" Female Inlet, 1½" Lead Pipe
Outlet, 1½" Female Vent.

Lavatory Vent Tees



No. 6498½



No. A6499½

No. 6498½ — Vent Tee 1½" Inlet, 1½" Outlet, 1½" Vent.

No. A6499½ — Lavatory Vent Tee-Wye.
1¼" Inlet, 1¼" Outlet,
1¼" Vent.

No. B6499½ — Same in 1½".

Tubes for Cast Brass Bath Traps



17 Gauge Brass Chrome Plated

*This trap tube is a special 1⅝" tube with bottom wedged. Threaded 1½" so that return bends tapped 1½" may be connected to 1⅝" waste and overflow tees.

No.	Diameter	Length	Threaded
6500	1⅝"	8"	1⅝"—27
6500A	1½"	8"	1½"—27
* 6500B	1⅝"	8"	1½"—27

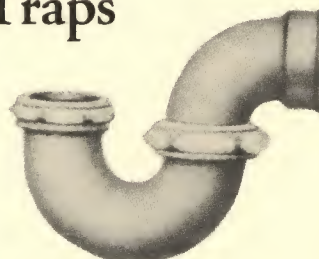
Cast Brass Bath Traps



Female Outlet

No. 6501
Slip Joint Inlet 1½"
Tapped 1½" I.P.

With Visible
Ground Joint
Inlets



Female Outlet—With Ground Joint Union

No. 6502
Slip Joint Inlet 1½"
Outlet 1½" I.P.

No. 6502A
Slip Joint Inlet 1⅝"
Outlet 1½" I.P.



Woodward Wanger Co.



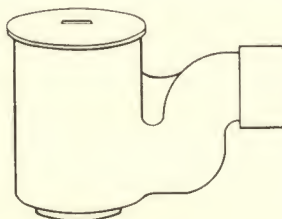
Cast Iron Bath Traps

BODY STYLES



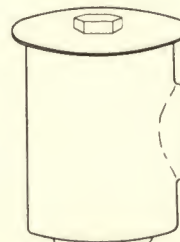
6503

Female Outlet Connection $1\frac{1}{2}$ " , Drum or Trap Body 4" x 8"



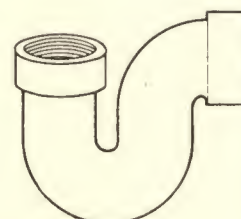
6503-A

Female Outlet $1\frac{1}{2}$ " Drum or Trap Body $2\frac{3}{4}$ " x $4\frac{3}{4}$ "



6503-B

Female Outlet $1\frac{1}{2}$ " Drum or Trap Body 4" x $5\frac{1}{4}$ "



6503-C

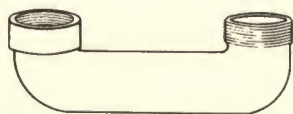
Female Outlet $1\frac{1}{2}$ " "P" $1\frac{1}{2}$ "

6503-D

Female Outlet 2" "P" 2"

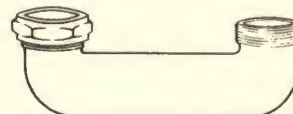
INLET BENDS

TO FIT ABOVE BODIES



No. 6503-E

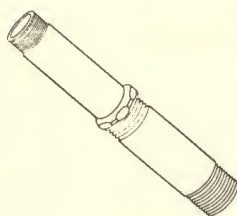
$1\frac{1}{2}$ " x 6" Center to Center Threaded



No. 6503-F

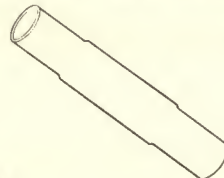
$1\frac{1}{2}$ " x 6" Center to Center Slip Joint

Tubes to fit inlet bends.



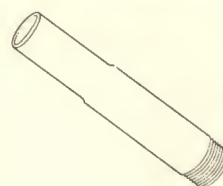
6503-G

$1\frac{1}{4}$ " Iron Pipe Male x $1\frac{1}{2}$ " O. D. x 8" Long



6503-H

$1\frac{1}{2}$ " O.D. x $1\frac{1}{2}$ " O. D. x 8" Long



6503-I

$1\frac{1}{4}$ " Iron Pipe Male x $1\frac{1}{2}$ " O. D. x 6" Long



6503-J

$1\frac{1}{4}$ " Iron Pipe Male x $1\frac{3}{8}$ " O. D. x 9" long



Woodward Wanger Co.



Brass Supply Pipes—Basin

One Piece Basin Supply Pipe Annealed
Polished Chrome

9/16" O.D.—16 Gauge

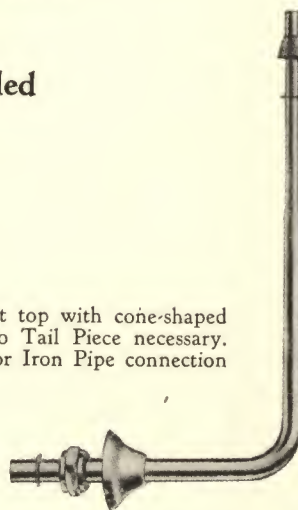
Annealed Seamless Brass 9/16" O.D., reduced at top to 7/16" and fitted at top with cone-shaped rubber washer and brass friction ring for connection to Basin Cock. No Tail Piece necessary. Furnished with Slip Joint nut, Rubber Washer and Brass Friction Ring for Iron Pipe connection at Floor or Wall.

To Floor

No. 6504-C—9/16" O.D., 16 Gauge, 29" overall, Chrome.
No. 6505-C—9/16" O.D., 16 Gauge, 32" overall, Chrome.

To Wall

No. 6506-C—9/16" O.D., 16 Gauge, 10" from end of Basin connection to center of bend, and 6 1/2" from center of bend to end of Wall connection. Chrome.



3/8" I.P.—14 Gauge

One Piece Supply Pipes, Annealed
Polished Chrome

Annealed Seamless Brass 3/8" I.P., reduced at top to 7/16" and fitted with cone-shaped Rubber Washer and Brass Friction Ring for connection to Basin Cock. No Tail Piece necessary. Threaded at bottom for 3/8" I.P. connection at Floor or Wall. Furnished with deep heavy flanges.

To Floor

No. 6508-C—3/8" I.P.S., 14 Gauge, 29" overall. Chrome.





Woodward Wanger Co.



Brass Supply Pipes—Basin

Semi-Annealed—Chrome Plated

$\frac{3}{8}$ " I.P.—11, 12 and 14 Gauge

Semi-Annealed Seamless Brass $\frac{3}{8}$ " I.P. with $\frac{3}{8}$ " x $\frac{1}{4}$ " Reducing Socket Connection to Basin Cock. Threaded at end for $\frac{3}{8}$ " I.P. Connection at Floor or Wall. Furnished with Extra Heavy Flanges.



To Floor

11 Gauge

No. 6511-C—Full $\frac{3}{8}$ " I.P. Size and Weight—26 $\frac{1}{2}$ " long.

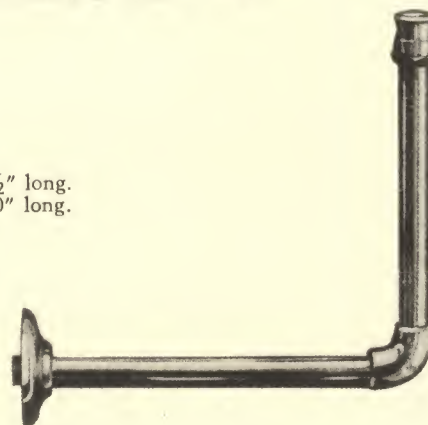
No. 6511 $\frac{1}{2}$ -C—Full $\frac{3}{8}$ " I.P. Size and Weight—30" long.

12 Gauge

No. 6512-C—Full $\frac{3}{8}$ " I.P. Size—26 $\frac{1}{2}$ " long.

14 Gauge

No. 6514-C—Full $\frac{3}{8}$ " I.P. Size—26 $\frac{1}{2}$ " long.



To Wall

Wall Supplies measure 9" from end of Basin Connection to center of Bend and 7" from center of Bend to end of Wall Connection.

No. 6515-C—Full $\frac{3}{8}$ " I.P. Size. 14 Gauge.

$\frac{3}{8}$ " I.P.—14 Gauge

Semi-Annealed—Chrome Plated

Semi-Annealed Seamless Brass. $\frac{3}{8}$ " I.P. with $\frac{3}{8}$ " x $\frac{1}{4}$ " Reducing Socket Connection to Basin Cock. Threaded at end for $\frac{3}{8}$ " I.P. Connection at Floor or Wall. Fitted with Wheel Handle Compression Stop. Furnished with Extra Heavy Flanges.

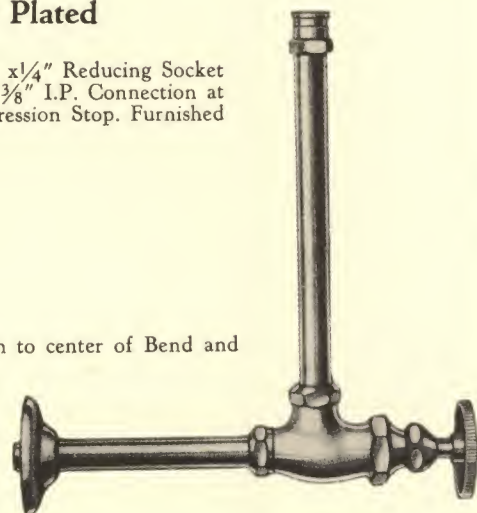
To Floor

No. 6516-C— $\frac{3}{8}$ " I.P., 14 Gauge—26 $\frac{1}{2}$ " long.

To Wall

Wall Supplies measure 9" from end of Basin Connection to center of Bend and 7" from center of Bend to end of Wall Connection.

No. 6518-C— $\frac{3}{8}$ " I.P., 14 Gauge.





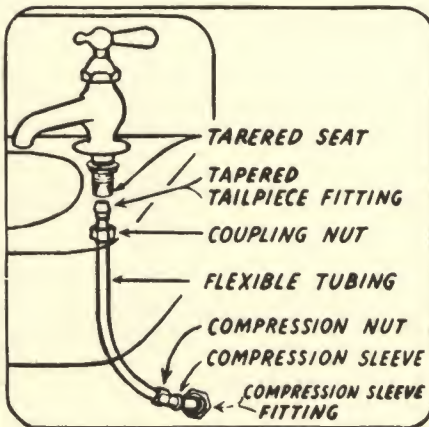
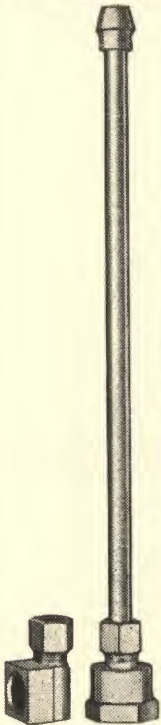
Woodward Wanger Co.



Lavatory Supply

Flexible Lavatory and Closet Tank Supplies

Ground Joint Fittings. Heavy Copper Tubing, self-adjusting to any angle. Makes hard-to-get-at corners easy to work in. Iron Pipe threads.

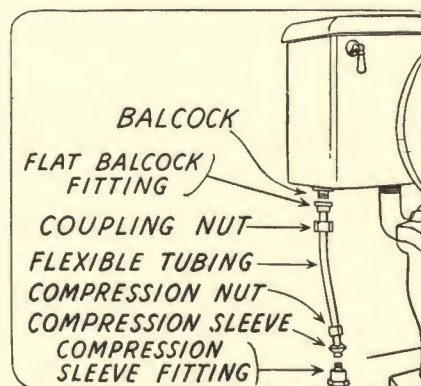


LAVATORY SUPPLIES

No.	Pattern	Finish	Size
6520	Straight	Chrome	3/8" x 12"
6521	Angle	Chrome	3/8" x 12"
6522	Straight	Chrome	1/2" x 12"
6523	Angle	Chrome	1/2" x 12"

CLOSET TANK SUPPLIES

All metal contacts - Ground joint fittings - No rubber, leather or fibre gaskets used - Heavy gauge copper tubing for non-corroding water flow - Heavy brass rod fittings - Accurate sharp cut threads, for durability and strength - Heavy flexible chrome plate - Self adjusting to any angle.



CLOSET TANK SUPPLIES

No.	Pattern	Finish	Size
6525	Straight	Chrome	1/2" x 20"

Closet Supply





Woodward Wanger Co.



Brass Supply Pipes—Basin

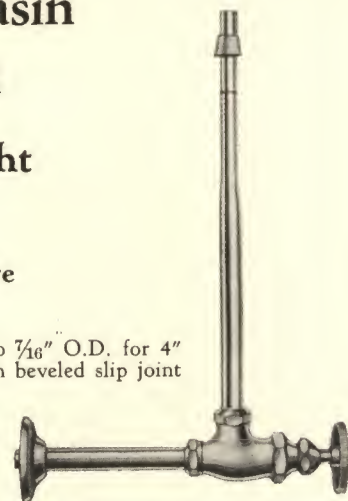
Semi-Annealed—Chrome Plated

$\frac{3}{8}$ " Full I.P. Size and Weight

To Wall
With Wheel Handle Compression Valve

Seamless Brass Tubing, Semi-annealed, $2\frac{1}{32}$ " O.D. The Basin end is reduced to $\frac{7}{16}$ " O.D. for 4" of the length. Basin Tube is 10" long. Wall tube is 6" long. Sold complete with beveled slip joint washer and brass friction ring for connection at Basin.

No. 6519-C— $\frac{3}{8}$ " I.P.S., 14 Gauge



Brass Supply Pipe—Closet Tank

Semi-Annealed—Chrome Plated

$\frac{3}{8}$ " Full I.P. Size and Weight

Semi-Annealed Seamless Brass Tubing $\frac{3}{8}$ " I.P., threaded at bottom for floor connection and having collar $1\frac{3}{16}$ " diameter at top for connection with Ballcock. Supplied with deep heavy flanges.

No. 6530-C— $\frac{3}{8}$ " I.P.S., 14 gauge, 21" long

Brass Supply Pipe—Closet Tank

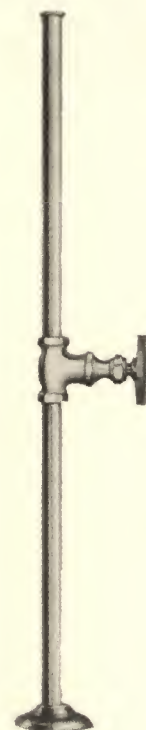
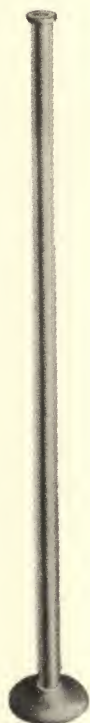
Semi-Annealed—Chrome Plated

$\frac{3}{8}$ " Full I.P. Size and Weight

With Wheel Handle Compression Valve

Semi-Annealed Seamless Brass Tubing $\frac{3}{8}$ " I.P., threaded at bottom for floor connection and having collar $1\frac{3}{16}$ " diameter at top for connection with Ballcock. Supplied with deep heavy flanges.

No. 6531-C— $\frac{3}{8}$ " I.P.S., 14 gauge, 21" overall





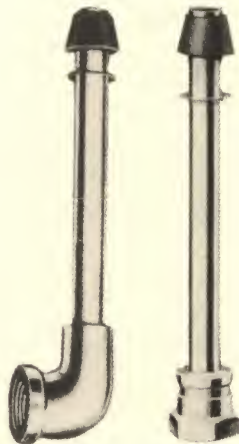
Woodward Wanger Co.



Handy Basin Supply Pipes

Satin Nickel and Chrome

ELBOW TYPE—7/16" O.D.



No.	Finish	Tapped	Length
6534 S.N.	Satin Nickel	3/8" I.P.	5"
6534 S.C.	Chrome	3/8" I.P.	5"
6534 1/2 S.N.	Satin Nickel	1/2" I.P.	5"
6534 1/2 S.C.	Chrome	1/2" I.P.	5"
6535 S.N.	Satin Nickel	3/8" I.P.	8"
6535 S.C.	Chrome	3/8" I.P.	8"
6535 1/2 S.N.	Satin Nickel	1/2" I.P.	8"
6535 1/2 S.C.	Chrome	1/2" I.P.	8"

STRAIGHT TYPE—7/16" O.D.



No.	Finish	Tapped	Length
6536 S.N.	Satin Nickel	3/8" I.P.	5"
6536 S.C.	Chrome	3/8" I.P.	5"
6536 1/2 S.N.	Satin Nickel	1/2" I.P.	5"
6536 1/2 S.C.	Chrome	1/2" I.P.	5"
6537 S.N.	Satin Nickel	3/8" I.P.	8"
6537 S.C.	Chrome	3/8" I.P.	8"
6537 1/2 S.N.	Satin Nickel	1/2" I.P.	8"
6537 1/2 S.C.	Chrome	1/2" I.P.	8"

"S.N." signifies Satin Nickel, "S.C." signifies Satin Chrome (not polished)

Handy Basin Supply

Cast One Piece

Cast Brass, one piece, supplied with Brass Friction Ring and cone shaped rubber washer for connection to Basin Cock. Tested to 60 lbs. air pressure under water.

No.	Finish	O.D.	Tapped	Length
6539 S.N.	Satin Nickel	7/16"	3/8" I.P.	5 3/8"
6540 S.N.	Satin Nickel	7/16"	1/2" I.P.	5 3/8"

"S.N." signifies Satin Nickel.

Handy Basin Supply

Tube 7/16" O.D.

Threaded

No. 6541



No. 6542



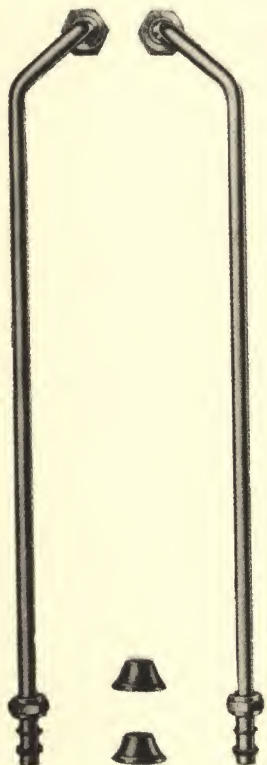
No. 6542 S.N.	3/8" I.P.	Length 5 inches
No. 6541 S.N.	3/8" I.P.	Length 5 inches



Woodward Wanger Co.



Brass Supply Pipes—Bath



No. 6550

45° Offset
9/16" O.D.—16 Gauge

Double Bend—Chrome Plated

Annealed Seamless Brass Tubing, $\frac{9}{16}$ " O.D., Double Bend Offset with Special Cone shaped lead connection to Bath Faucet assembled to pipe.

Furnished with Coupling Nut, Slip Nut, Rubber Washer and Friction Ring. Slip Nut for $\frac{1}{2}$ " Iron Pipe connection at floor.

Furnished with extra heavy deep flanges.

No. 6550-C— $\frac{9}{16}$ " O.D., 16 Gauge, 45° Offset, $21\frac{1}{2}$ " long.

45° Offset
9/16" O.D.—18 Gauge

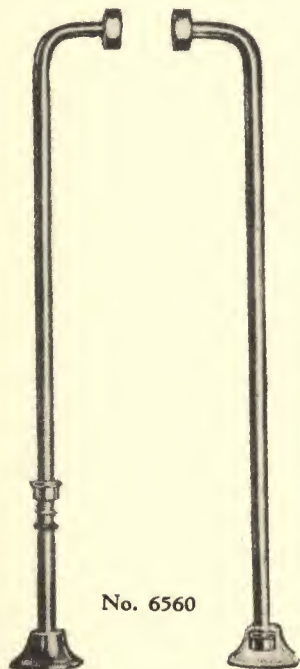
Double Bend—Chrome Plated

Annealed Seamless Brass Tubing, $\frac{9}{16}$ " O.D., Single Bend 45 Degree Offset with Special Cone shaped rubber connection to Bath Faucet assembled to pipe.

Furnished with Coupling Nut, Slip Nut, Rubber Washer and Friction Ring. Slip Nut for $\frac{1}{2}$ " Iron Pipe connection at floor.

Furnished with extra heavy deep Flanges.

No. 6556-C— $\frac{9}{16}$ " O.D., 18 Gauge, 45° Offset, $21\frac{1}{2}$ " long.



No. 6560

90° Offset
9/16" O.D.—16 Gauge

Single Bend—Chrome Plated

Annealed Seamless Brass Tubing, $\frac{9}{16}$ " O.D., Single Bend 90 Degree Offset with Special Brass Cone shaped connection to Bath Faucet assembled to pipe.

Furnished with Coupling Nut, Slip Nut, Rubber Washer and Friction Ring. Slip Nut for $\frac{1}{2}$ " Iron Pipe connection at floor.

Furnished with extra heavy deep Flanges.

No. 6560-C— $\frac{9}{16}$ " O.D., 16 Gauge, 90° Offset, $21\frac{1}{2}$ " long.



Woodward Wanger Co.



Brass Supply Pipes—Bath

Threaded Both Ends

Polished Chrome

$\frac{1}{2}$ " I.P. Seamless Brass

Semi-Annealed—Heavy Flanges

Made from $\frac{1}{2}$ " Semi-Annealed Seamless Brass Tubing, threaded both ends $\frac{1}{2}$ " I.P. With deep heavy Flange.

No. 6574-C— $\frac{1}{2}$ " I.P., Full I.P. Size and Weight, $20\frac{1}{2}$ " long.

No. 6580-C— $\frac{1}{2}$ " I.P., 14 Gauge, $20\frac{1}{2}$ " long.

No. 6581-C— $\frac{1}{2}$ " I.P., Full I.P. Size and Weight, 24" long.



Nos. 6575-6580

Bath Supply Pipes

Threaded Both Ends

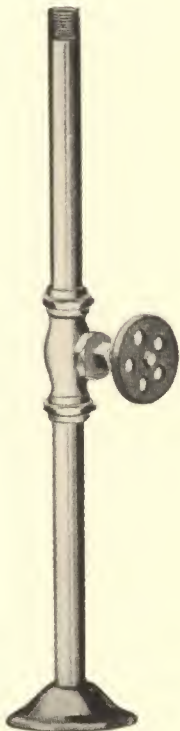
Polished Chrome

$\frac{1}{2}$ " Full I.P. Size and Weight
and 14 Gauge

Made from $\frac{1}{2}$ " Semi-Annealed Seamless Brass Tubing threaded both ends $\frac{1}{2}$ " I.P. and equipped with Brass Wheel Handle Compression Stop. With deep heavy Flange.

No. 6583-C— $\frac{1}{2}$ " I.P., 12 Gauge, $20\frac{1}{2}$ " long.

No. 6585-C— $\frac{1}{2}$ " I.P., 14 Gauge, $20\frac{1}{2}$ " long.



Nos. 6583-6585



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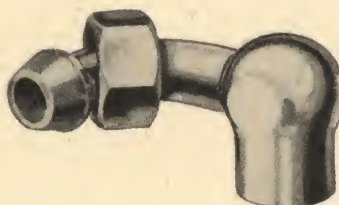
Bath Faucet Parts

—Couplings—



**Bent I.P. Male
Satin Finish**

No.	Threaded	Finish
6607	$\frac{3}{8}$ " I.P.	Satin Finish
6608	$\frac{1}{2}$ " I.P.	Satin Finish



**Ball Offset Elbow
Ground Joint**

No.	Tapped	Finish
6609	$\frac{3}{8}$ " I.P.	Chrome
6610	$\frac{1}{2}$ " I.P.	Chrome



**Special Offset Coupling
Chrome Plated**

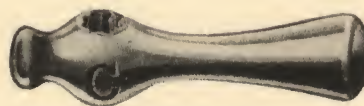
No. 6611 — For Bath Tub drillings other than $\frac{3}{8}$ ". Adjustable to fit drillings in tub from 4" to $6\frac{1}{2}$ " Center to Center.

Handles and Indexes

Chrome Plated



No. 6614-C— $2\frac{5}{8}$ " Brass Four Arm Metal Button Handle. Chrome Plated.



No. 6615-C — All Brass Lever Handle for Bath and Sink Faucets. Chrome Plated.



No. 6617-C—Index Ring for Holding Index Button on Nos. 6612 and 6614 Handles. Chrome Plated.



No. 6618-C— $\frac{5}{8}$ " Threaded Metal Index Cap, Marked H or C. Chrome Plated. For Handles Nos. 6612 and 6614.

No. 6618A— $\frac{3}{4}$ " Threaded Metal Index Cap, Marked H or C. Chrome Plated. For Handle No. 6613.



No. 6616-C—One Piece $\frac{5}{8}$ " Metal Button for Nos. 6612 and 6614 Handles. Chrome Plated.

No. 6616A—One Piece $\frac{3}{4}$ " Metal Button for No. 6613 Handle. Chrome Plated.



Woodward Wanger Co.



Compression Faucets

— Plain —

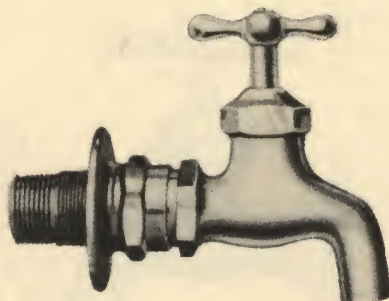
Red Metal—Rough, Polished and Plated

I.P. Threads



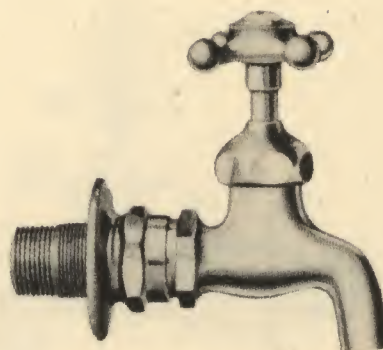
Male I.P. Thread

No.	Size	Finish
6623	1/2"	Rough
6628	1/2"	Polished
6630-C	1/2"	Chrome
6632	3/8"	Polished



Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
6639-C	1/2"	Chrome



Adjustable Screw Flange
Male I.P. Thread

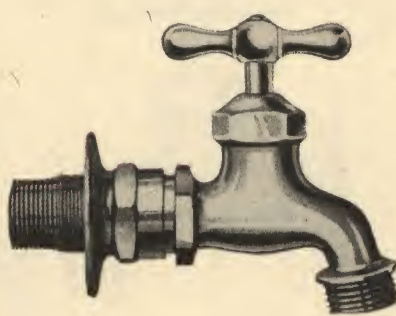
No.	Size	Finish
6640-C	1/2"	Chrome

Compression Faucets with Hose Connection



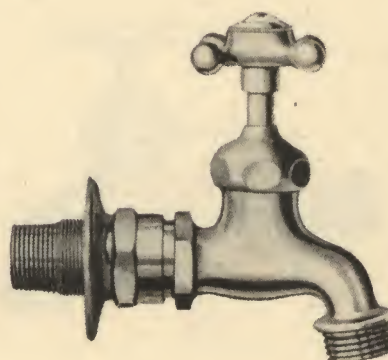
Male I.P. Thread

No.	Size	Finish
H-6624	1/2"	Rough
H-6625	3/8"	Rough
H-6629	1/2"	Polished
H-6631-C	1/2"	Chrome
H-6633	3/8"	Polished



Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
H-6639-C	1/2"	Chrome



Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
H-6640-C	1/2"	Chrome



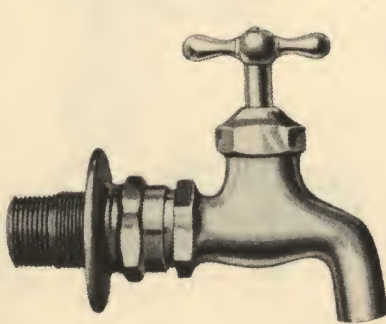
Woodward Wanger Co.



Compression Faucets

— Plain —

Red Metal—Rough, Polished and Plated
I.P. Threads



Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
6641-C	1/2"	Chrome



Female Flange
I.P. Thread

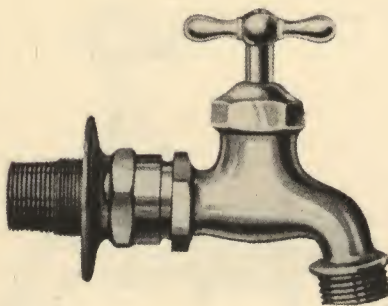
No.	Size	Finish
6642-C	1/2"	Chrome



Female Flange
I.P. Thread

No.	Size	Finish
6643-C	1/2"	Chrome

Compression Faucets with Hose Connection



Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
H-6641-C	1/2"	Chrome



Female Flange
I.P. Thread

No.	Size	Finish
H-6642-C	1/2"	Chrome



Female Flange
I.P. Thread

No.	Size	Finish
H-6643-C	1/2"	Chrome



Woodward Wanger Co.

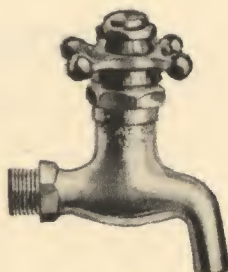


Self-Closing Faucets

Chrome Plated
Ball Bearing

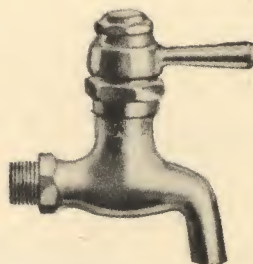
All These Faucets Have:—

- (1) Bronze Renewable Seats.
- (2) Phosphor Bronze Spring.
- (3) Bronze Ball Bearings.
- (4) Anti-Splash Rib in Spout.



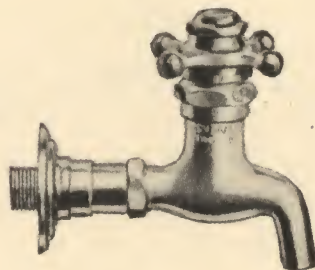
No. 6645

Four Ball Handle, with Metal Index. Samson Lock for quick handle adjustment.



No. 6648

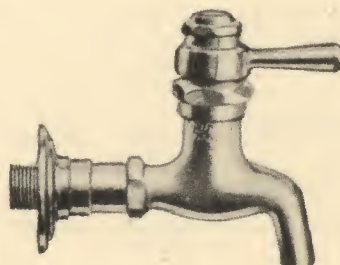
Brass Lever Handle, with Metal Index. Samson Lock for quick handle adjustment.



No. 6646

Four Ball Handle, with Metal Index. Adjustable Threaded Flange. Samson Lock for quick handle adjustment.

All 1/2"



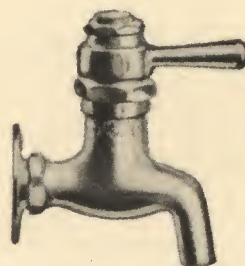
No. 6649

Brass Lever Handle, with Metal Index. Adjustable Thread Flange. Samson Lock for quick handle adjustment.



No. 6647

Four Ball Handle, with Metal Index. Female Flange. Samson Lock for quick handle adjustment.



No. 6650

Brass Lever Handle, with Metal Index. Female Flange. Samson Lock for quick handle adjustment.

The "Samson" Lock is the most positive, as well as the quickest and easiest device known to adjust the handle to the wearing of the washer, and to keep a self-closing faucet in good operating condition.



Woodward Wanger Co.





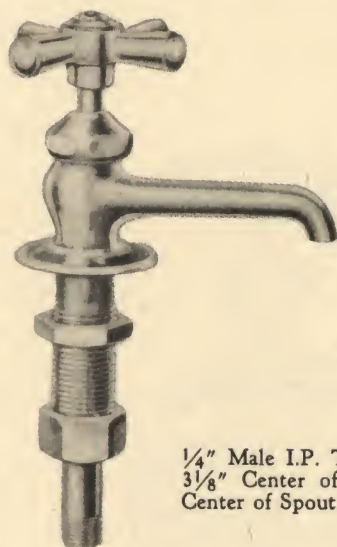
Woodward Wanger Co.



Lavatory Faucets

Chrome Plated

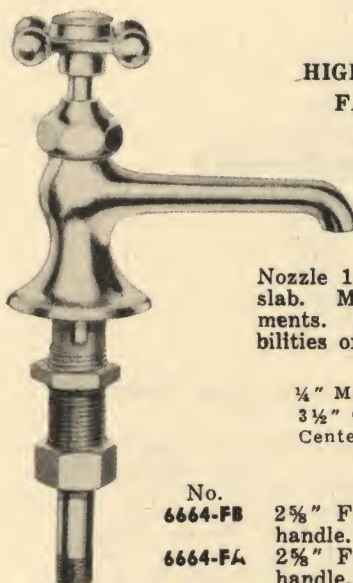
All Shanks are
2¼" long.



¼" Male I.P. Tail Piece.
3⅛" Center of Body to
Center of Spout.

No.
6663-FA

Description
2½" Four Arm, Chrome Index
handle.



HIGH NOZZLE
FAUCET

Nozzle 1½" above Lavatory
slab. Meets Code require-
ments. Removes all possi-
bilities of back syphonage.

¼" Male I.P. Tail Piece.
3½" Center of Body to
Center of Spout.

No.	Description
6664-FB	2½" Four Ball, Chrome Index handle.
6664-FA	2½" Four Arm, Chrome Index handle.
6664-CL	Chrome Lever (Brass) Index handle.



High Spout Code Pattern

Designed to meet code requirements in
many sections of the country. Measures
1½" from face of flange to bottom of spout,
and 3½" from center of body to center of
spout.

6665-FB	2½" Four Ball, Chrome Index handle.
6665-FA	2½" Four Arm, Chrome Index handle.
6665-CL	Chrome Lever handle.



Woodward Wanger Co.



Compression
Lavatory Faucets

Chrome Plated
Only



No. 6667-FA

Extra Long Nozzle

No. 6667-FA— $2\frac{5}{8}$ " Four Arm Chrome Index handle. The nozzle is $4\frac{1}{2}$ " center of body to center of outlet. $\frac{1}{4}$ " Male I.P. Tail Piece. Supplied with regular $2\frac{1}{4}$ " shank. Except for length of spout is the same as **No. 6664-FA**.



6668-FA

Extra Long Shank

No. 6668-FA— $2\frac{5}{8}$ " Four Arm Chrome Index handle. The shank on this faucet is $3\frac{1}{2}$ " long instead of $2\frac{1}{4}$ ". $\frac{1}{4}$ " Male I.P. Tail Piece. Except for length of shank it is the same as **No. 6664-FA**.

Compression
Side Arm Lavatory Faucet

Made for right or left hand. Brass Lever handles only.

No. 6669-C—Brass Chrome plated Lever handled, indexed. Width of flange fitting to basin is $2\frac{1}{8}$ ". Length of spout $3\frac{1}{2}$ " center of inlet to center of outlet. Height of spout above basin slab $1\frac{1}{8}$ " meeting all Code requirements. This eliminates all chance of back syphonage. Supplied with regular $2\frac{1}{4}$ " shank. $\frac{1}{4}$ " Male I.P. Tail Piece.



No. 6669-C

Note:—Be sure to specify Right or Left hand and whether Hot or Cold.

(Illustration Shows Right Hand Pattern)



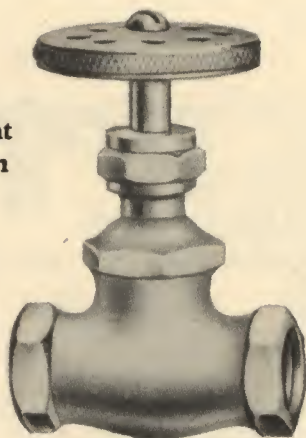
Woodward Wanger Co.



Lavatory Stops

Compression

Straight
Pattern



Chrome
•
Wheel Handles
•
Stuffing Boxes
•

Angle
Pattern



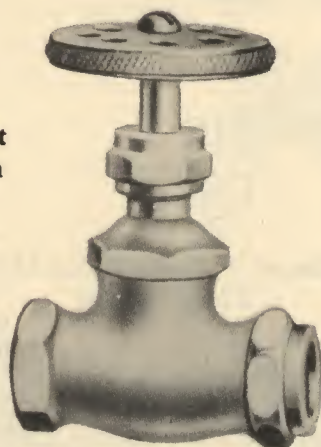
Tapped Iron Pipe Thread

No. 6672 N.P.	Size $\frac{3}{8}$ " I.P.
No. 6672-C	Size $\frac{3}{8}$ " I.P.
No. 6673 N.P.	Size $\frac{1}{2}$ " I.P.
No. 6673-C	Size $\frac{1}{2}$ " I.P.

Tapped Iron Pipe Thread

No. 6674 N.P.	Size $\frac{3}{8}$ " I.P.
No. 6674-C	Size $\frac{3}{8}$ " I.P.
No. 6675 N.P.	Size $\frac{1}{2}$ " I.P.
No. 6675-C	Size $\frac{1}{2}$ " I.P.

Straight
Pattern



Chrome
•
Wheel Handles
•
Stuffing Boxes
•

Angle
Pattern



Slip Joint One End

No.	Size I.P.	To Slip
6676 N.P.	$\frac{3}{8}$ "	$\frac{3}{8}$ " I.P. ($\frac{1}{8}$ " Tube)
6676-C	$\frac{3}{8}$ "	$\frac{3}{8}$ " I.P. ($\frac{1}{8}$ " Tube)
6676 1/2 N.P.	$\frac{1}{2}$ "	$\frac{1}{8}$ " O.D.
6676 1/2-C	$\frac{1}{2}$ "	$\frac{1}{8}$ " O.D.
6677 N.P.	$\frac{1}{2}$ "	$\frac{1}{8}$ " O.D.
6677-C	$\frac{1}{2}$ "	$\frac{1}{8}$ " O.D.
6677 1/2 N.P.	$\frac{1}{2}$ "	$\frac{1}{2}$ " I.P.
6677 1/2-C	$\frac{1}{2}$ "	$\frac{1}{2}$ " I.P.
6678 N.P.	$\frac{1}{2}$ "	$\frac{3}{8}$ " I.P.
6678-C	$\frac{1}{2}$ "	$\frac{3}{8}$ " I.P.

Slip Joint One End

No.	Size I.P.	To Slip
6679 N.P.	$\frac{3}{8}$ "	$\frac{3}{8}$ " I.P. ($\frac{1}{8}$ " Tube)
6679-C	$\frac{3}{8}$ "	$\frac{3}{8}$ " I.P. ($\frac{1}{8}$ " Tube)
6679 1/2 N.P.	$\frac{1}{2}$ "	$\frac{1}{8}$ " O.D.
6679 1/2-C	$\frac{1}{2}$ "	$\frac{1}{8}$ " O.D.
6680 N.P.	$\frac{1}{2}$ "	$\frac{1}{8}$ " O.D.
6680-C	$\frac{1}{2}$ "	$\frac{1}{8}$ " O.D.
6680 1/2 N.P.	$\frac{1}{2}$ "	$\frac{1}{2}$ " I.P.
6680 1/2-C	$\frac{1}{2}$ "	$\frac{1}{2}$ " I.P.
6681 N.P.	$\frac{1}{2}$ "	$\frac{3}{8}$ " I.P.
6681-C	$\frac{1}{2}$ "	$\frac{3}{8}$ " I.P.

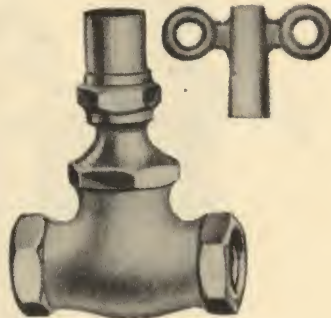


Woodward Wanger Co.



Compression Lavatory Valves

KEY TYPE



**Straight Pattern
with Loose Key**

No. 6682-C $\frac{3}{8}$ "
No. 6682 $\frac{1}{2}$ -C $\frac{1}{2}$ "

Chrome Plated

Loose Key

Stuffing Boxes



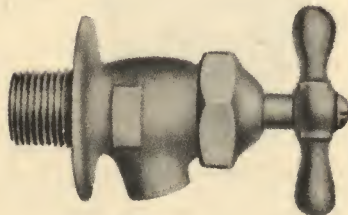
**Angle Pattern.
with Loose Key**

No. 6683-C $\frac{3}{8}$ "
No. 6683 $\frac{1}{2}$ -C $\frac{1}{2}$ "

Wash Tray Faucets

WHITE PLATED

Wash Tray Faucets



**Compression—White Plated
Wash Tray Faucets**

With and Without Hose Connection

No. 6684-H $\frac{1}{2}$ "
No. 6684 $\frac{1}{2}$ "
No. 6685-H $\frac{3}{4}$ "
No. 6685 $\frac{3}{4}$ "

Sediment Faucet—Boiler Drain
Wheel Handle



Tapped Male and Female

No. 6686 (Male) $\frac{1}{2}$ "
No. 6686-A (Male) $\frac{3}{4}$ "
No. 6686-B (Female) $\frac{1}{2}$ "



Woodward Wanger Co.

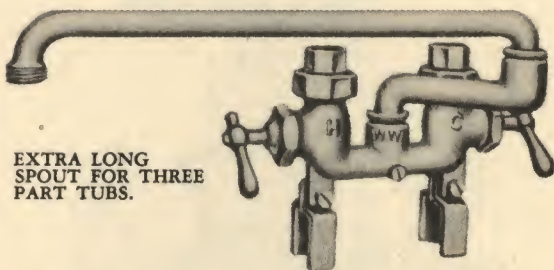


Double Laundry Tray Faucets

With Drain Outlet

Brass — Rough Nickel Finish

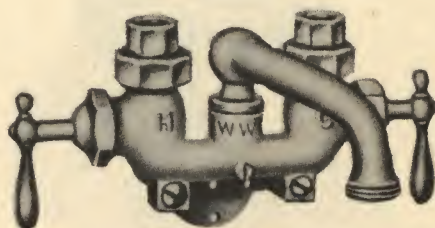
With Tray Clamps



EXTRA LONG
SPOUT FOR THREE
PART TUBS.

No. 6687—Inlets $\frac{1}{2}$ " I.P. Ground Joint Brass Unions, measuring $3\frac{3}{8}$ " Center to Center. 3" Clearance between tray clamps. Length of double spout, when fully extended is 16" long. With Brass Lever handle.

With Wall Bracket

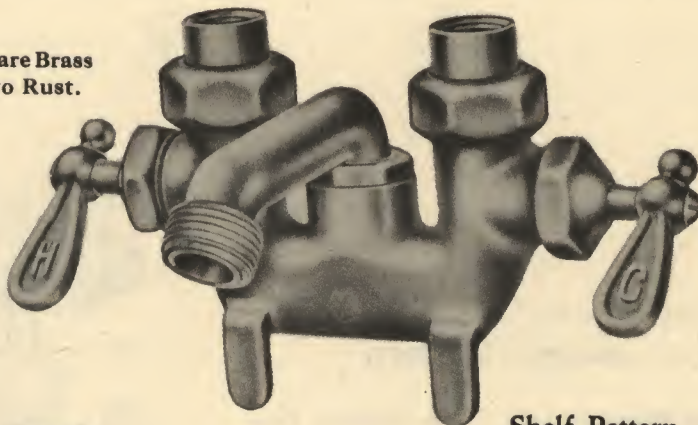


No. 6688—Inlets $\frac{1}{2}$ " I.P. Ground Joint Brass Unions, measuring $3\frac{3}{8}$ " Center to Center. Inlets are 2" Center to wall. Brass Lever handles. Length of spout $4\frac{1}{2}$ ".

No. 6688-A—Same with $7\frac{1}{2}$ " Spout.

With Tray Clamps

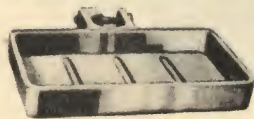
All Parts are Brass
no Iron to Rust.



No. 6690—Inlets $\frac{1}{2}$ " I.P. Ground Joint Brass Unions, measuring $3\frac{3}{8}$ " Center to Center. Tray clamps have 3" clearance between them. Length of spout $4\frac{1}{2}$ " Brass Lever handles.

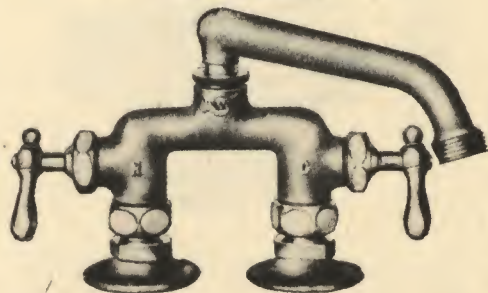
No. 6690-A—Same with $7\frac{1}{2}$ " Spout.

Soap Dish — Cast Aluminum



No. 6691—Will hold largest cake of Laundry Soap. Clamps on pipe above the Union. Furnished with drip holes.

Shelf Pattern



No. 6692—Inlets $\frac{1}{2}$ " I.P., Ground Joint Brass Unions, measuring $3\frac{3}{8}$ " Center to Center. Brass Lever handle. With 6" Spout. The Spout is $3\frac{1}{4}$ " above the top of tray.

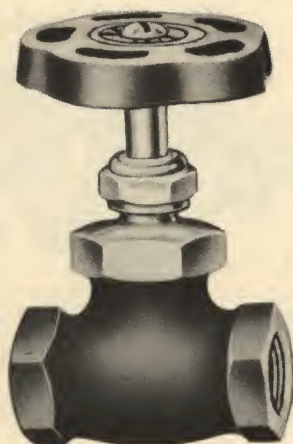


Woodward Wanger Co.



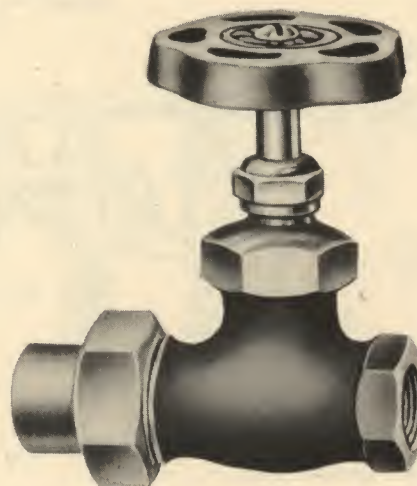
Compression Stops

Red Brass-
Rustproof Iron Wheel
Handles



With Stuffing box

No.	Size
6694	$\frac{3}{8}$ " I.P.
6694A	$\frac{1}{2}$ " I.P.
6694B	$\frac{3}{4}$ " I.P.
6694D	1" I.P.



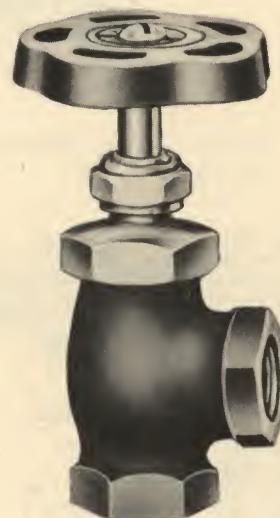
With Union and Stuffing Box

No.	Size
6695	$\frac{1}{2}$ " I.P.
6695A	$\frac{3}{4}$ " I.P.

Angle Pattern

Large Waterway — With Stuffing box

No.	Size
6696	$\frac{3}{8}$ " I.P.
6696A	$\frac{1}{2}$ " I.P.
6696B	$\frac{3}{4}$ " I.P.



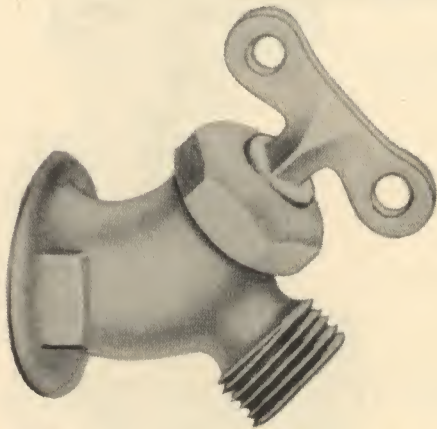


Woodward Wanger Co.



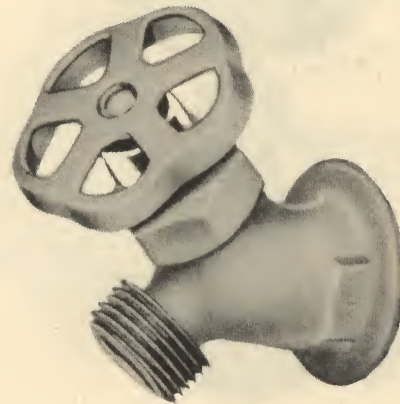
Lawn Faucets

Loose Key Brass Handle



No. 6697..... $\frac{1}{2}$ " I.P. and $\frac{3}{4}$ " Hose
No. 6697A..... $\frac{3}{4}$ " I.P. and $\frac{3}{4}$ " Hose

Loose Brass Wheel Handle



No. 6698 $\frac{1}{2}$ " I.P. and $\frac{3}{4}$ " Hose
No. 6699 $\frac{3}{4}$ " I.P. and $\frac{3}{4}$ " Hose

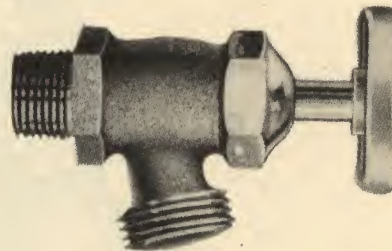
Garden and Lawn Faucets

Garden Hose Faucet
Iron Wheel Handle, Sheridized



No. 6700 $\frac{3}{4}$ " I.P. and $\frac{3}{4}$ " Hose

Lawn Faucet, Junior Pattern
Iron Wheel Handle,



No. 6701 $\frac{1}{2}$ " I.P. and $\frac{3}{4}$ " Hose
No. 6702 $\frac{3}{4}$ " I.P. and $\frac{3}{4}$ " Hose



Woodward Wanger Co.



Stops and Drains

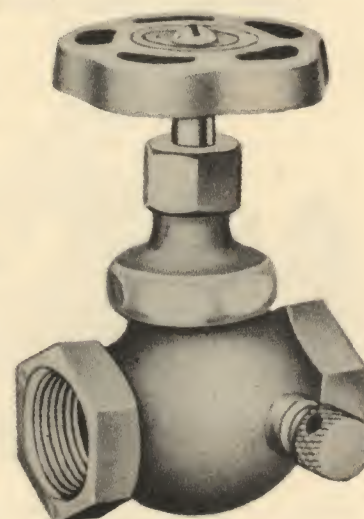
Red Brass
With
Compression Waste Cap

•
Large Waterway



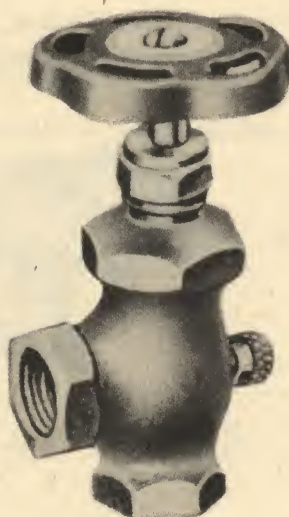
Copper to Copper
Stop and Drain

No.	Size
6703	$\frac{3}{8}$ "
6703-A	$\frac{1}{2}$ "
6704	$\frac{3}{4}$ "



Straight Pattern
with Stuffing Box

No. 6705-SB	$\frac{1}{2}$ "
No. 6706-SB	$\frac{3}{4}$ "
No. 6707-SB	1"



Angle Pattern
with Stuffing Box

No. 6708	$\frac{1}{2}$ "
No. 6709	$\frac{3}{4}$ "
No. 6710	1"

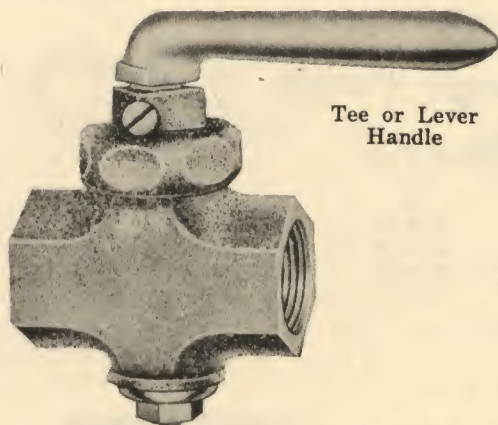


Woodward Wanger Co.

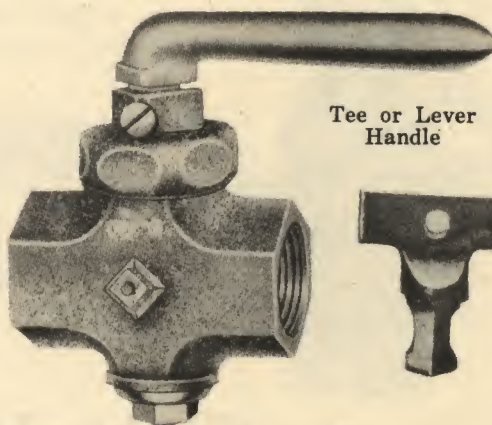


Ground Key

Stops and Stops and Drains



Tee or Lever
Handle



Tee or Lever
Handle

Straight Way Pattern

Stop for Iron Pipe

No. 6712	.....	1/2"
No. 6713	.....	3/4"

Specify Tee or Lever Handle

Stop and Drain for Iron Pipe

No. 6714	.....	1/2"
No. 6715	.....	3/4"

Specify Tee or Lever Handle

Automatic Stop and Drain

The construction assures the rapid CLOSING of the waste when opening the Stop and the like rapid OPENING of the waste when closing the Stop to drain water in the return piping.



WHEEL HANDLE

No.	Size
No. 6716	1/2 in.
No. 6717	3/4 in.



Woodward Wanger Co.



Globe Valves

GROUND SEAT OR WASHER DISC

Made from special composition Valve Metal.

Angle Pattern

With Ground Seat No.	With Washer Disc No.	Size
6718	6718-W	3/8 in.
6719	6719-W	1/2 in.
6720	6720-W	3/4 in.
6721	6721-W	1 in.

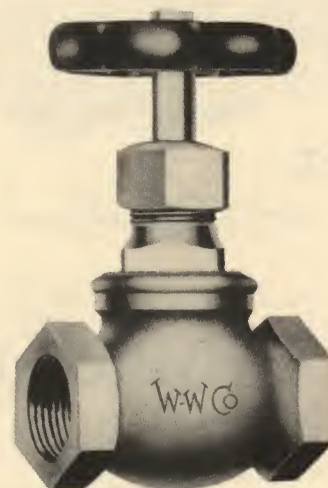
Globe Valves

GROUND SEAT OR WASHER DISC

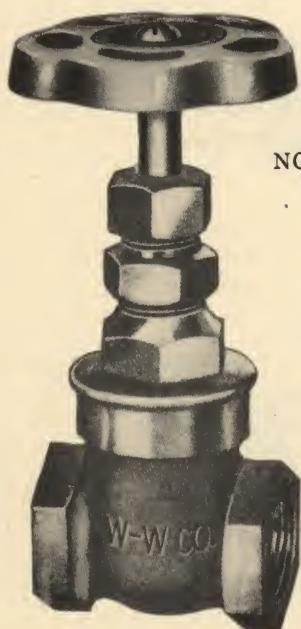
Nos. 6718-6721

Straight Pattern

With Ground Seat No.	With Washer Disc No.	Size
6725	6725-W	3/8 in.
6726	6726-W	1/2 in.
6727	6727-W	3/4 in.
6728	6728-W	1 in.



Nos. 6725-6728



NON-RISING
STEM

Gate Valves

For Steam Pressure Up to 100 Lbs., and Water
Pressure Up to 135 Lbs.

Gland in Stuffing Box

Can be repacked under pressure if valve is wide open.

No.	Size
6735	1/2 in.
6736	3/4 in.
6737	1 in.
6738	1 1/4 in.
6739	1 1/2 in.
6740	2 in.

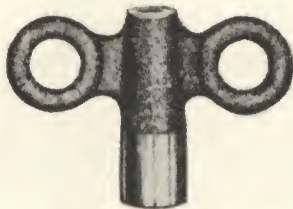


Woodward Wanger Co.



Handles

Brass Key Handle
Rough Nickel Finish



For Lavatory Stops and
Lawn Faucets

No. 6746—Lavatory Stop $\frac{3}{8}$ "
No. 6747—Lawn Faucets $\frac{5}{8}$ "

Brass Wheel Handle
Polished Chrome Finish



For Lavatory Valves and
Compression Stops

No. 6748-C Chrome

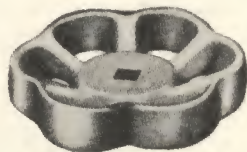
Brass Wheel Handle
Rough Nickel Finish



For Lawn Faucets

No. 6749 Rough Nickel

Sheridized Iron Wheel Handle
for Rough Compression Stops
and Stops and Drains



No. 6750 —Specify size for which it is to
be used.

Tee Handle for Stops and Drains
Japanned Finish



No. 6751 Japanned



Nos. 6752-6753

Faucet Handle Screws—Brass

No.	Finish	Length	Threaded
6752.....	Polished	$\frac{1}{2}$ in.	9-32
6753.....	Chrome	$\frac{1}{2}$ in.	9-32



No. 6754

Set Screws—Brass

Chrome Plated, for Faucet Handles

No.	Length	Threaded
6754.....	$\frac{1}{4}$ in.	8-32

Polished Brass Tee Handle
for Compression Faucets



No. 6755 Polished Brass

Rough Nickel Brass Lever
Handle for Laundry Faucets



No. 6756 Rough Nickel



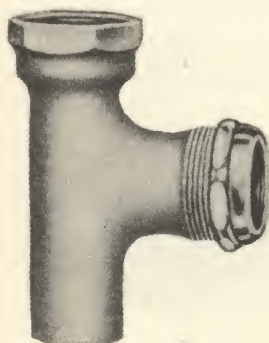
Woodward Wanger Co.



Waste and Vent Tees

CAST BRASS

Visible Ground Joint Connection on Side

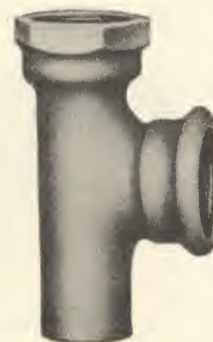


Nos. 6760-6763

No.	Waste For	Vent Tapped For	Slip Joint For
6760	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/4 in. Tube
6761	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/2 in. Tube
6762	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/4 in. Tube
6763	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/2 in. Tube

Iron Pipe Thread on Side

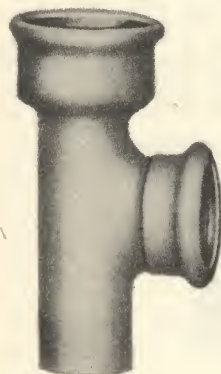
No.	Waste For	Vent Tapped For	Side Tapped For
6776	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/4 in. I. P.
6777	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/2 in. I. P.
6778	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/4 in. I. P.
6779	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/2 in. I. P.



Nos. 6776-6779

Iron Pipe Thread on Side

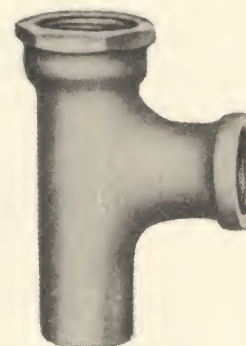
No.	Waste For	Vent To Caulk	Side Tapped For
6780	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/4 in. I. P.
6781	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/2 in. I. P.
6782	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/4 in. I. P.
6783	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/2 in. I. P.



Nos. 6780-6783

Fine Thread on Side

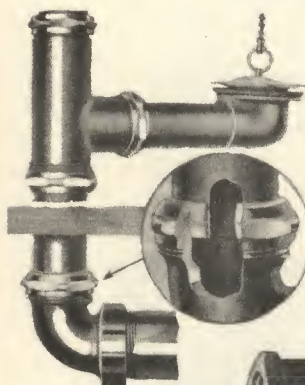
No.	Waste Tapped For	Vent Tapped For	Side Tapped For
6784	1 1/4 in. I. P.	1 1/4 in. I. P.	1 1/4 in. F. T.
6785	1 1/2 in. I. P.	1 1/2 in. I. P.	1 1/2 in. F. T.



Nos. 6784-6785

Waste Elbows

No. 6786-6787—Elbow connection from Bath waste to drainage line. Eliminates the cast iron screwed drainage elbow, and having a short radius with slip connection on one end permits installation in tight places. Iron pipe end has interior shoulder, making smooth unobstructed joint. Inlet end is made with a double ground joint brass cone, coupled with a I.P.S. Brass Jam nut.



FOR
IRON PIPE



FOR
LEAD
PIPE

Iron Pipe

No. 6786—1 1/2" I.P.S. Female x 1 3/8" Slip Joint
No. 6787—1 1/2" I.P.S. Female x 1 1/2" Slip Joint

Lead Pipe

No. 6788—1 1/4" Lead Pipe x 1 1/4" Slip Joint
No. 6789—1 1/2" Lead Pipe x 1 1/2" Slip Joint

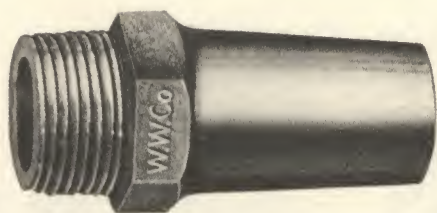


Woodward Wanger Co.



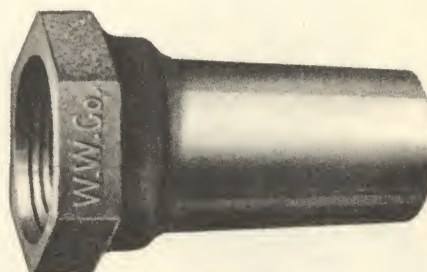
Soldering Nipples

Red Metal



MALE

6893	1/2 in.
6894	3/4 in.
6895	1 in.
6896	1 1/4 in.
6897	1 1/2 in.

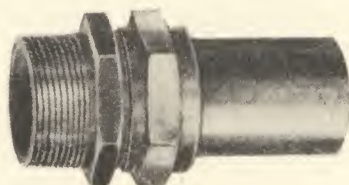


FEMALE

6901	1/2 in.
6902	3/4 in.

Ground Joint Union Coupling

— Brass —



No.	For
6904	1 1/2" L.P. x 1 1/2" I.P. Male
6905	1 1/2" L.P. x 1 1/2" I.P. Female

Trap Screws

— Cast Brass —

For Lead Pipe and Drum Traps



No.	Size	Finish
6906	1"	Machined
6907	4"	Machined

For Iron Pipe Cleanout



No.	Tapped	Finish
6908	1 1/2" I.P.	Chrome
	Diameter of flange 3 1/16"	



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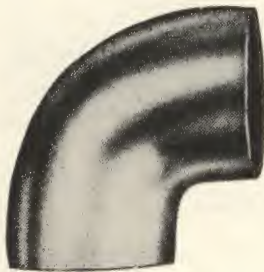


Brass Fittings for Tubing

Nickel Plated or Chrome

If wanted in Chrome, add "C"
to the Catalog Number

For Soldering or Fine Thread



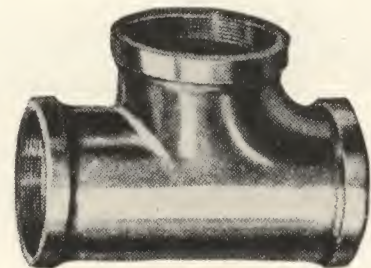
90° Elbow
TO SOLDER

No.	Size
7320.....	1¼ in.
7322.....	1½ in.



45° Elbow
TO SOLDER

No.	Size
7331.....	1¼ in.
7333.....	1½ in.



Tee
TO SOLDER

No.	Size
7337.....	1¼ in.
7339.....	1½ in.

90° Elbow FINE THREAD	
No.	Size
7323.....	1¼ in.
7325.....	1½ in.

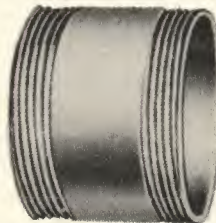
45° Elbow FINE THREAD	
No.	Size
7334.....	1¼ in.
7336.....	1½ in.

Tee FINE THREAD	
No.	Size
7340.....	1¼ in.
7342.....	1½ in.

For Soldering or Fine Thread

Chrome Plated

Space Nipple



No.	Threaded	Length
7345	1¼" F.T.	1"

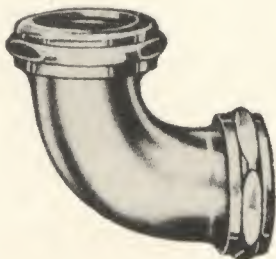


Woodward Wanger Co.



Brass Slip Joint Fittings for Tubing

Nickel or Chrome Plated



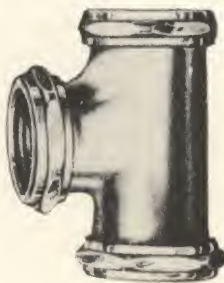
90° Elbow
DOUBLE SLIP JOINT

No.	Size
7300.....	1 $\frac{1}{4}$ in.
7302.....	1 $\frac{1}{2}$ in.



45° Elbow
DOUBLE SLIP JOINT

No.	Size
7303.....	1 $\frac{1}{4}$ in.
7305.....	1 $\frac{1}{2}$ in.



Tee
TRIPLE SLIP JOINT

No.	Size
7306.....	1 $\frac{1}{4}$ in.
7307.....	1 $\frac{3}{8}$ in.
7308.....	1 $\frac{1}{2}$ in.



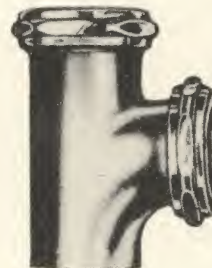
90° Elbow
ONE END SLIP JOINT
ONE END FINE THREAD

No.	Size
7309.....	1 $\frac{1}{4}$ in.
7310.....	} Tapped, 1 $\frac{1}{2}$ in. } Slip Joint, 1 $\frac{1}{4}$ in.
7311.....	



45° Elbow
FINE THREAD AND SLIP JOINT

No.	Size
7312.....	1 $\frac{1}{4}$ " F.T. x 1 $\frac{1}{4}$ " Tube
7313.....	1 $\frac{1}{2}$ " F.T. x 1 $\frac{1}{2}$ " Tube



Tee
FINE THREAD AND SLIP JOINT

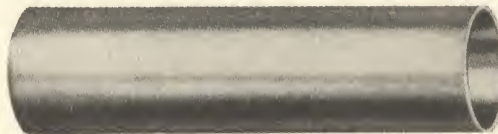
No.	Size
7314.....	Tapped 1 $\frac{1}{4}$ " F.T., Slip Joint End for 1 $\frac{1}{4}$ " Tube. Slip Joint Side for 1 $\frac{1}{4}$ " Tube.
7315.....	Tapped 1 $\frac{1}{2}$ " F.T., Slip Joint End for 1 $\frac{1}{2}$ " Tube. Slip Joint Side for 1 $\frac{1}{2}$ " Tube.



Woodward Wanger Co.



Brass Pipe and Tubing



Nos. 7400-7436

Furnished Nickel Plated
unless Chrome is specified

For Chrome add
"C" to Catalog Number

Annealed Tubing

Number	7400	7401	7402	7403	7404	7405
Outside Diameter	7/16"	7/16"	1/2"	1/2"	2 1/32"	1 3/16"
Gauge	19	18	19	18	14	13

Full Iron Pipe Sizes

Number	7406	7407	7408	7409	7410	7411	7412	7413	7414
Size	1/8" I.P.	1/4" I.P.	3/8" I.P.	1/2" I.P.	3/4" I.P.	1" I.P.	1 1/4" I.P.	1 1/2" I.P.	2" I.P.
Weight per ft. lbs.	.25	.44	.61	.91	1.24	1.74	2.56	3.04	4.02

Stock lengths: 3, 6 and 12-ft. — 6-ft. lengths shipped unless otherwise specified.

Hard Temper for Wastes, Bars, Railings, etc.

Number	7415	7416	7417	7418	7419	7420	7421	7422
Outside Diameter	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1"	1 1/8"
Gauge	20	20	20	20	20	20	17	20

Number	7423	7424	7425	7426	7427	7428	7429
Outside Diameter	1 1/4"	1 3/8"	1 1/2"	2"	1 1/4"	1 3/8"	1 1/2"
Gauge	20	20	20	20	17	17	17

Stock lengths: 3 and 6-ft. — 6-ft. lengths shipped unless otherwise specified.

Casing to Cover Wrought Iron Pipe

Number	7430	7431	7432	7433	7434	7435	7436
Outside Diameter of Casing	3/4"	1 5/16"	1 1/8"	1 3/8"	1 3/4"	1 31/32"	2 7/16"
To Cover Iron Pipe	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"

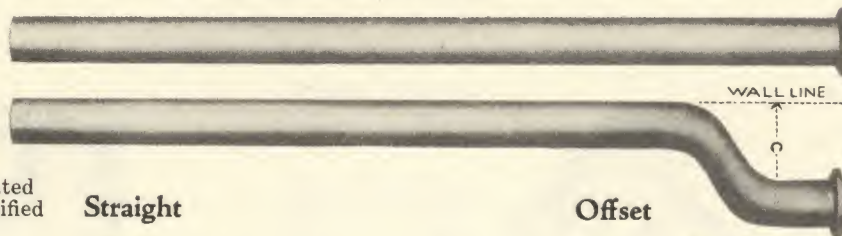
Stock lengths: 3 and 6-ft. — 6-ft. lengths shipped unless otherwise specified.

Cannot furnish in longer than 6-ft. lengths.

Flush Pipes for High Tanks

Nickel Plated or Chrome

If wanted in
Chrome, add "C"
to the Catalog
Number



Furnished Nickel Plated
unless Chrome is specified

Straight

No.	Size	Diameter of Collar	Length	Gauge
7437	1 1/4"	1 7/8"	5 1/2'	24
7437A	1 1/4"	1 7/8"	6'	20

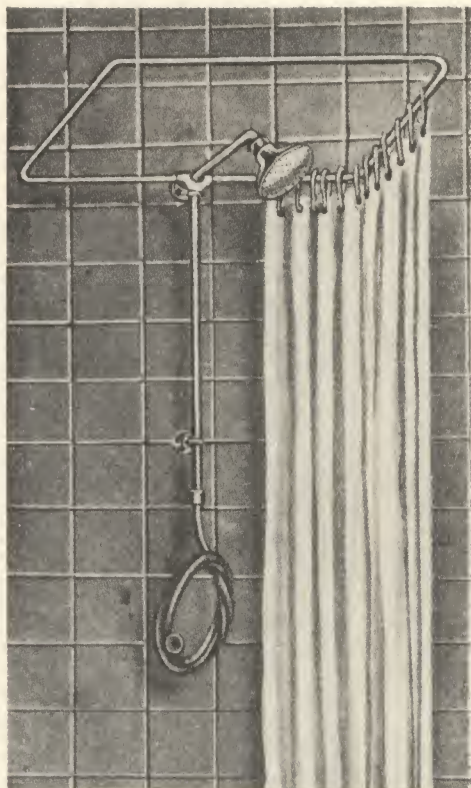
Offset

No.	Size	Offset "C"	Diameter of Collar	Length	Gauge
7438A	1 1/4"	3"	1 5/8"	5 1/2'	24
7438B	1 1/4"	3"	1 7/8"	5 1/2'	24
7438D	1 1/4"	3"	1 5/8"	6'	20
7438E	1 1/4"	3"	1 7/8"	6'	20
7438F	1 1/4"	3 1/2"	1 7/8"	5 1/2'	24
7438G	1 1/4"	3 1/2"	1 7/8"	6'	20

Flush Pipes regularly furnished with Stamped Collars with diameters as listed above. The 1 7/8" diameter Stamped Collar will readily trim to any desired diameter. Cast or Special Collars will be furnished, if so ordered. On 20-Gauge Flush Pipes, the Cast Collars both Threaded and Soldered to Tube.



Woodward Wanger Co.



Portable Showers

Rectangular Portable Shower Chrome Plated

Description

Seamless Brass Tubing $\frac{3}{4}$ ", Size 24" x 30" Rectangular Ring, with Ceiling Support. Has $\frac{5}{8}$ " Riser and Cast Wall flange. Rubber Tubing with faucet connection. Is equipped with 4" Cast Ball Joint shower head.

No. 7470-C Chrome Plated as described, less curtain.

No. 7471-C Chrome Plated shower with two (2) 8 ounce White Duck Curtains. One 72" x 72" and one 36" x 72".

Rectangular Portable Shower Chrome Plated

Seamless Brass $\frac{3}{4}$ " Tubing, size 28" x 42" Rectangular Ring, with ceiling support. Has $\frac{3}{4}$ " Riser and cast wall flange. Strong, durable rubber tubing with faucet connection. Equipped with 4" Cast Brass Shower Head with offset arm. Comes with twenty (20) Curtain Hooks.

Description

No. 7478-C Chromium Plated Shower less curtain.

No. 7479-C Chromium Plated Shower with two 72"x72" White Duck Curtains.



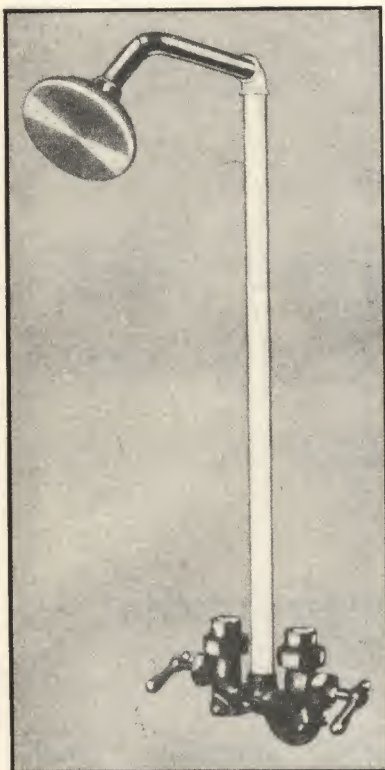


Woodward Wanger Co.



Exposed Showers

For Factories and Institutions



No. 7482

Rough Nickel

Industrial Shower, $\frac{1}{2}$ " double shower valve with wall bracket. Brass unions on inlets of valve ($3\frac{3}{8}$ " C. to C., 2" C. to wall.) Brass lever handles, with 8" bent shower arm and 4" Brass forged shower head.

The vertical riser and elbows are not furnished.



No. 7483

Chromium Plated

Exposed Double Shower fixture, $\frac{3}{8}$ " I. P. S. Flanged female union couplings, brass gooseneck fitted with supporting flange. Clean Spray Shower Head with ball joint. Brass 4-arm metal button handles.

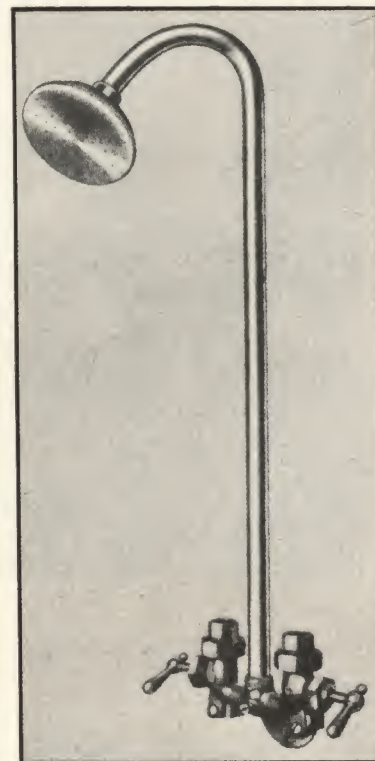
No. 7484

Same as above, but with supplies to the floor.

No. 7485

Same as above, but with supplies to the ceiling.

NOTE—Supply inlets 6" C. to C. center of valves to face of shower head 23". Face of shower head to top of gooseneck $6\frac{1}{2}$ ".



No. 7486

Industrial Shower, $\frac{1}{2}$ " double shower valve with wall bracket, with union inlets on the valve, Brass lever handles, galvanized gooseneck shower arm with 4" wrought brass shower head. $\frac{1}{2}$ " I. P.

No. 7487

Same as No. 7486 with Chrome Plated Brass Gooseneck Shower Arm.

NOTE—Supply inlets $3\frac{3}{8}$ " C. to C. 2" C. to wall, C. of wall bracket to face of shower head 38". Face of shower head to top of gooseneck $6\frac{1}{2}$ ".

INDUSTRIAL SHOWERS SHOWN ON THIS PAGE ARE EQUIPPED WITH DRAIN FOR SHOWER ARM AND VALVE BODY.

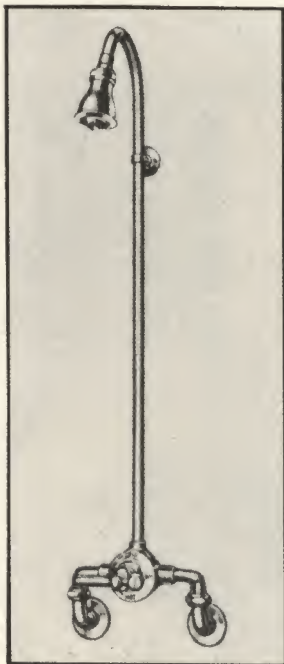


Woodward Wanger Co.



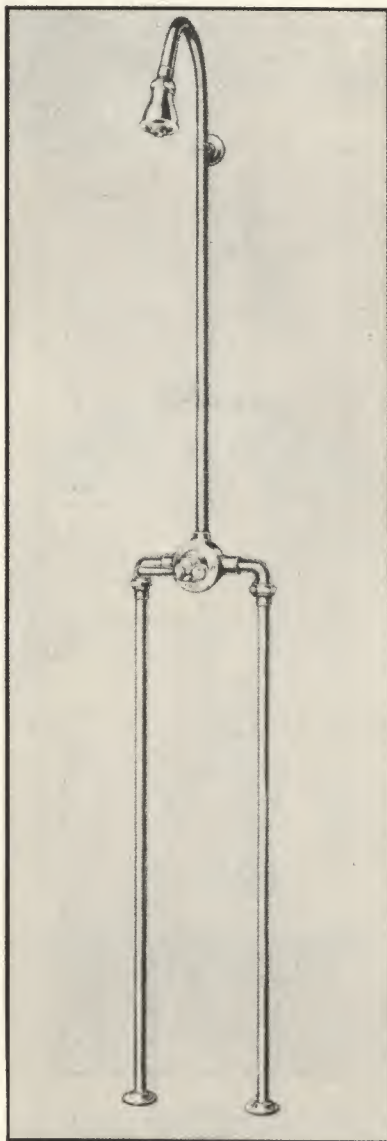
Exposed Mixing Valve Showers

Brass—Chromium Plated



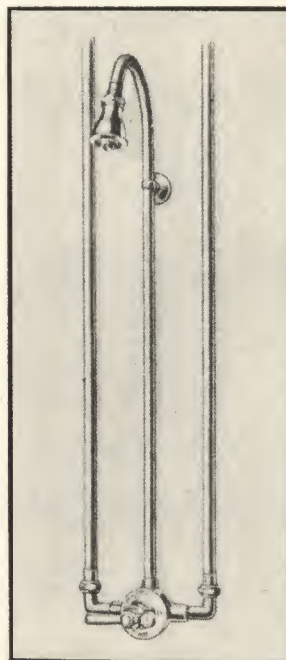
No. 7489

$\frac{1}{2}$ " Shower Mixing Valve with supplies to wall. Goose-neck Shower arm with volume control. Clean Spray Shower head with ball joint. Riser 25" from end to top of bend.



No. 7490

$\frac{1}{2}$ " Shower Mixing Valve with Supplies to floor. Gooseneck shower arm with volume control. Clean Spray shower head with ball joint. Riser 25" from end to top of bend.



No. 7491

$\frac{1}{2}$ " Shower Mixing Valve with supplies to Ceiling. Gooseneck Shower Arm with volume control. Clean Spray shower head with ball joint. Riser 25" from end to top of bend.





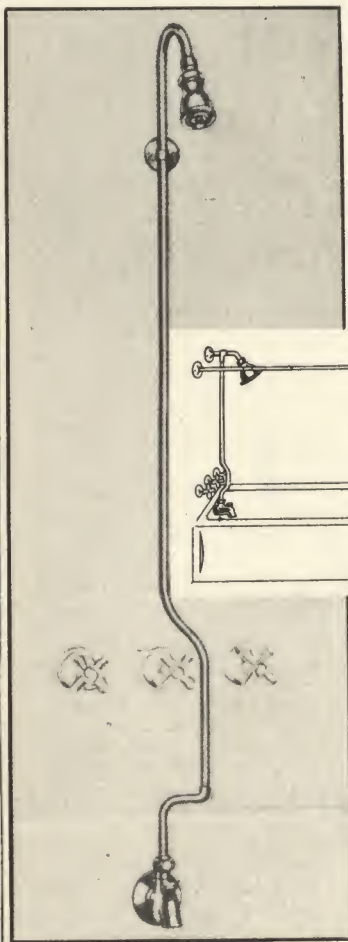
Woodward Wanger Co.



Plus Showers

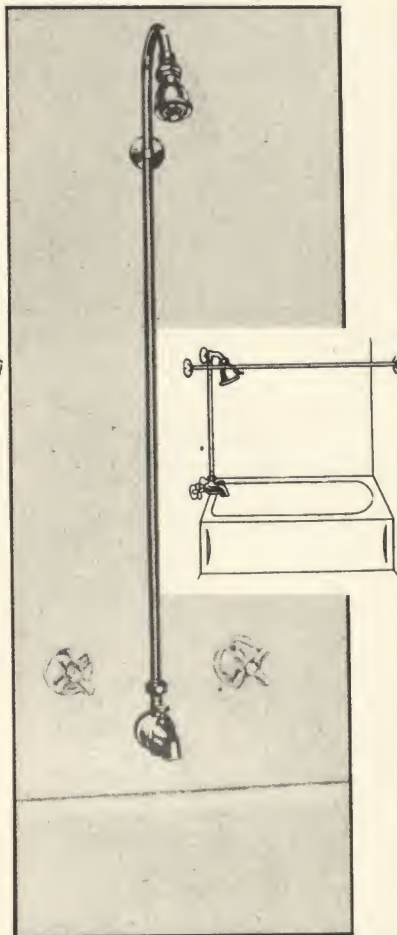
Fully automatic as water always run through spout when supply valves are first opened. When closing supply valves, the diverter valve automatically returns to spout position. To operate, pull spout knob, then diverter valve is raised and stream is diverted to shower. Stream will not flow to shower unless

diverter valve is raised. This prevents unexpected showers. Water can be tested and tempered to suit, at the spout first, then transferred to shower. Heavy 6" heavy cast brass spout with $\frac{3}{4}$ " inlet and non-splashing feature. Only one moving part, no springs or levers.



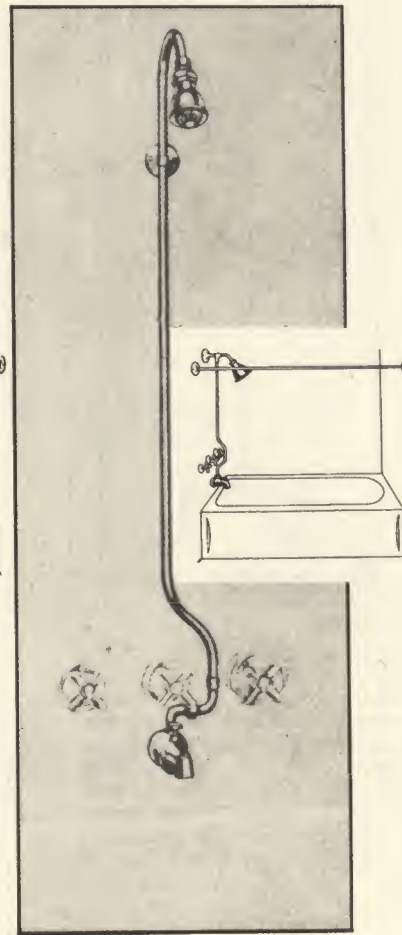
No. 7492

$\frac{3}{8}$ " I. P. S. Chrome Plated. With Automatic Diverter Tub Nozzle for use with Standing Drain fixture. Riser pipe with wall support and Clean Spray Shower Head with Ball Joint and Volume Control. From center of spout to the face of the shower head is $55\frac{1}{2}$ ".



No. 7493

$\frac{3}{8}$ " I. P. S. Chrome Plated. With Automatic Diverter over the Rim Nozzle for use with Standing Drain fixture. Riser pipe with wall support and Clean Spray Shower Head with Ball Joint and Volume Control. From center of spout to the face of the shower head is $46\frac{1}{2}$ ".



No. 7494

$\frac{3}{8}$ " I. P. S. Chrome Plated. With Automatic Diverter over R'm Nozzle for use with Over Rim Tub filler. Riser pipe with wall support and Clean Spray Shower Head with Ball Joint and Volume Control. From center of spout to the face of the shower head is $46\frac{1}{2}$ ".



Woodward Wanger Co.



EXPOSED BATH SUPPLY AND SHOWER FIXTURE

No. 7496-C—Shower only Chrome Plated. Lever handle. Bath faucet as in circular insert. Riser pipe with 16" support for back or end wall. Clean Spray shower head. Frame 11/16" brass, Chrome Plated tubing, 37" x 27" with 36" support to ceiling and support to shower arm.

No. 7497-C—Same with two White Duck Curtains 5 ft. x 6 ft. (no hooks).

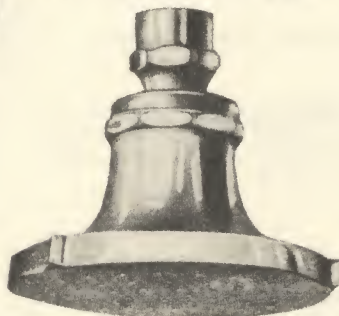
Shower Accessories

Wrought Brass Head



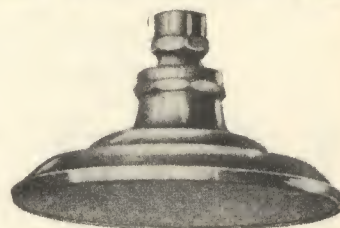
No. 7500—4½" dia. Chrome Plated head. Removable face. I. P. S. ½".

Cast Brass Shower Head With Integral Ball Joint



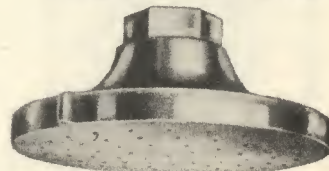
No. 7504—4" Diameter Chrome Plated head. Removable face. I. P. S. ½".

Wrought Brass Shower Head with Integral Ball Joint



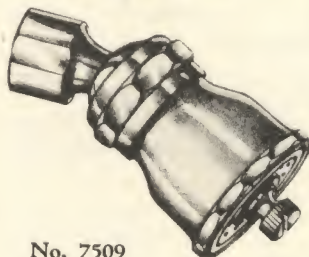
No. 7501—4½" dia. Chrome Plated head. Removable face. I. P. S. ½".

Cast Brass Shower Head Rough Brass or Chrome



No. 7502—4" dia. Rough Brass head. Removable face.
No. 7503—4" dia. Chrome Plated head. Removable face. I. P. S. ½".

Cast Brass Shower Head with Ball Joint



No. 7509

Self Cleaning Shower Head. Solid Brass with Ball Joint Chrome Plated. ½" I.P.

Clean Spray Shower Head



No. 7505 — Chrome Plated 2¼" head with ball joint and volume control. I. P. S. ½".

2" White Metal Shower Head Chrome Plated



No. 7505-B—With Ball Joint. ½" I. P. Perforated Head can be removed to clean.



Woodward Wanger Co.



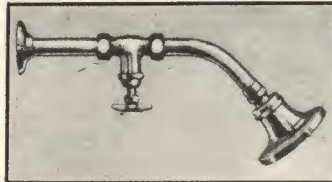
Shower Accessories

Shower Head and Arm



No. 7510—Chromium Plated Shower Arm 12" long, 4" cast brass head with integral ball joint, removable face and wrought wall flange.

No. 7510½—Same except that shower arm is 8" long.

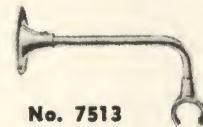


No. 7511—Chromium Plated Shower Arm 12" long and includes volume control valve or shut off. With 4" cast brass head with integral ball joint. Removable face and wrought wall flange.

Adjustable Shower Rod Ceiling and Wall Support

No. 7512 N.P.—Ceiling Support.

No. 7512-C — Ceiling Support.

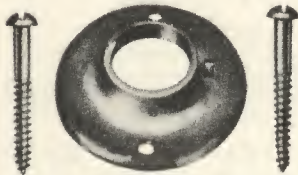


No. 7513

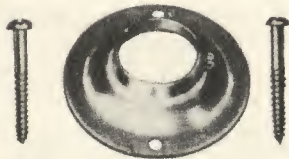


No. 7512

Curtain Rod Flanges Polished Chrome



No. 7514—Chromium Plated adjustable heavy cast brass flange with set and wood screws. Slip pipe 1" O. D.



No. 7515—Chromium Plated adjustable wrought brass flange with set and wood screws. Slip pipe 1" O. D.

Curtain Rod Flanges

Oblong Curtain Rod Flange Polished Chrome



No. 7516 — Chromium Plated heavy cast brass adjustable flange with set and wood screws. Used with corner curtain rod. Slip pipe 1" O. D.

Roller Bearing Curtain Ring Hooks



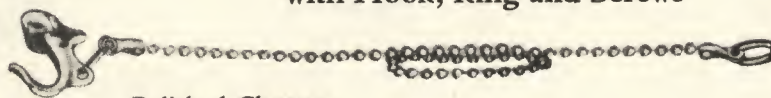
No. 7517 — For 1" bars, Chrome Plated. Make curtain slide easily.

Curtain Hooks



No. 7847-C —Chromium Plated

Curtain Chain Hold Back with Hook, Ring and Screws



Polished Chrome.

No. 7519



Woodward Wanger Co.



Shower Accessories

Hose Nozzle Connection
for Showers



No. 7520
Dipped Nickel

Shower Mixer



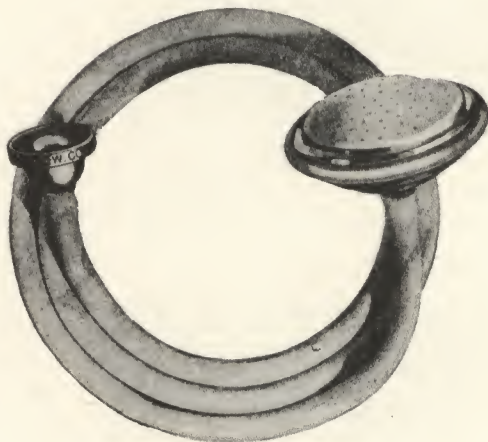
No. 7521
Nickel Plated Brass

Bath Sprinkler



No. 7522
Nickel Plated with White
Rubber Bumper ring. $3\frac{1}{2}$ "
face.

Hand Shower



No. 7524

High quality white corrugated rubber tubing,
with Nickel Plated Bulb Connection and Brass
N. P. Spray, with rubber ring protector.

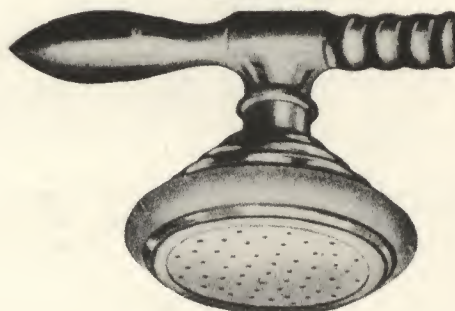
Expansion
Shampoo Coupling



No. 7523

No. 7523-A—Small .. $\frac{3}{4}$ " O.D.
No. 7523-B—Medium $1\frac{1}{16}$ " O.D.
No. 7523-C—Large ... $1\frac{1}{16}$ " O.D.

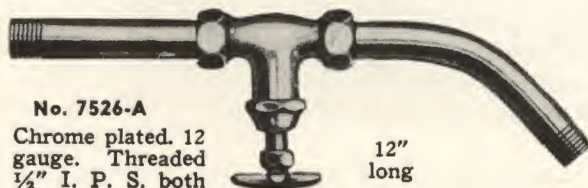
Hand Shower



No. 7525

No. 7525 N.P. Nickel Plated
No. 7525-C— Chrome Plated

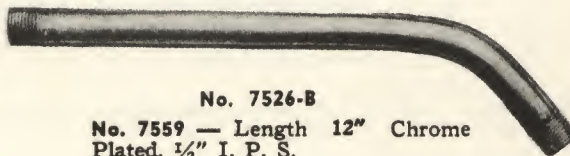
Shower Arm with Volume
Control Valve



No. 7526-A
Chrome plated. 12
gauge. Threaded
 $\frac{1}{2}$ " I. P. S. both
Ends.

12"
long

Offset Shower Arm



No. 7526-B
No. 7559 — Length 12" Chrome
Plated, $\frac{1}{2}$ " I. P. S.



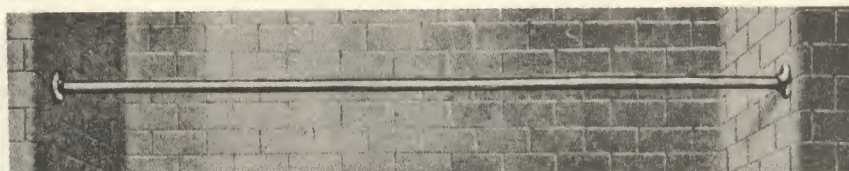
Woodward Wanger Co.



Shower Curtain Rods

Brass—Chromium Plated

STRAIGHT ROD FOR BUILT-IN TUBS



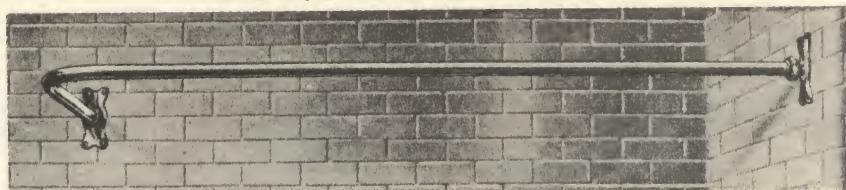
No. 7527-C
No. 7528-C
No. 7529-C

Tube 1"—20 gauge, length 38"
Tube 1"—20 gauge, length 62"
Tube 1"—20 gauge, length 68"

For 3 ft. square tub
For 5 ft. tub
For 5½ ft. tub

Furnished with two round cast, Chromium plated flanges and Chromium plated brass screws. Slip in connection.

BENT, FOR BUILT-IN TUB



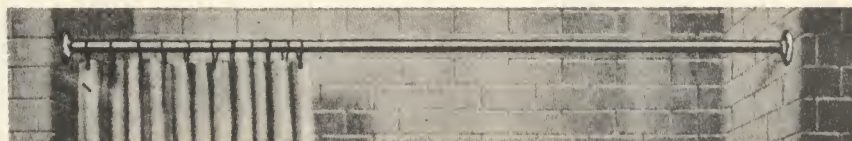
No. 7532-C
No. 7533-C

Tube 1"—20 gauge, Size 28"x57"
Tube 1"—20 gauge, Size 28"x63"

For 5 ft. tub
For 5½ ft. tub

Furnished with two cast, Chrome plated oblong flanges, and Chromium plated brass screws. Slip in connection.

COMPLETE WITH CURTAIN AND HOOKS



No. 7535-C Tube 1"—20 gauge, length 62" For 5 ft. tub. Duck Curtain 66" x 72" (10 Hooks)
No. 7536-C Tube 1"—20 gauge, length 68" For 5½ ft. tub. Duck Curtain 72" x 72" (12 Hooks)
Furnished with two round cast, Chromium plated flanges and Chromium plated brass screws.

COMPLETE WITH CURTAIN, HOOKS AND HOLDBACK



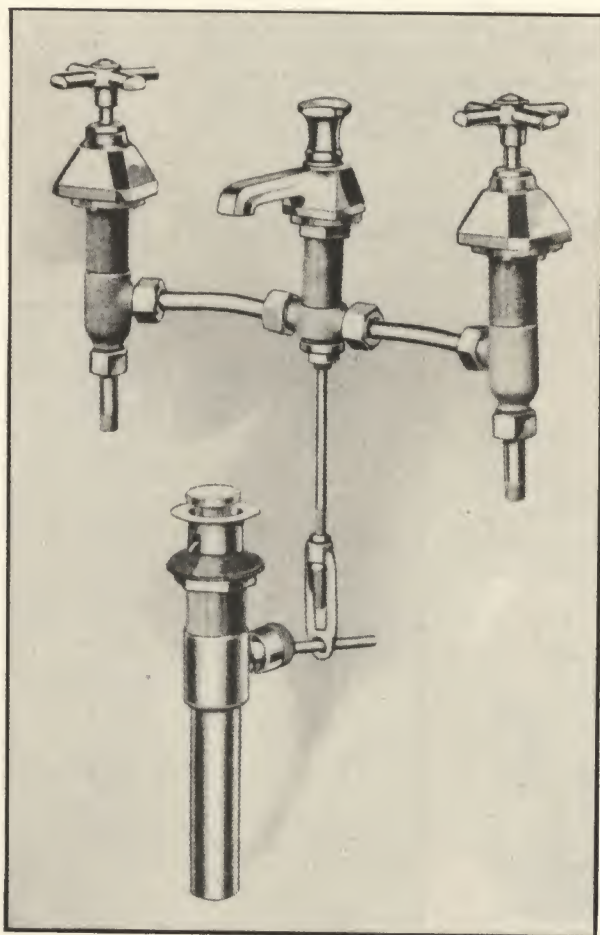
No. 7538-C Tube 1"—20 gauge, Size 28"x57" For 5 ft. tub. Curtains, 36" x 72" and 66" x 72" (15 hooks)
No. 7539-C Tube 1"—20 gauge, Size 28"x63" For 5½ ft. tub. Curtains, 36" x 72" and 72" x 72" (15 hooks)
Furnished with two cast, Chrome plated oblong flanges, and Chromium plated brass screws. Slip in connection.



Woodward Wanger Co.



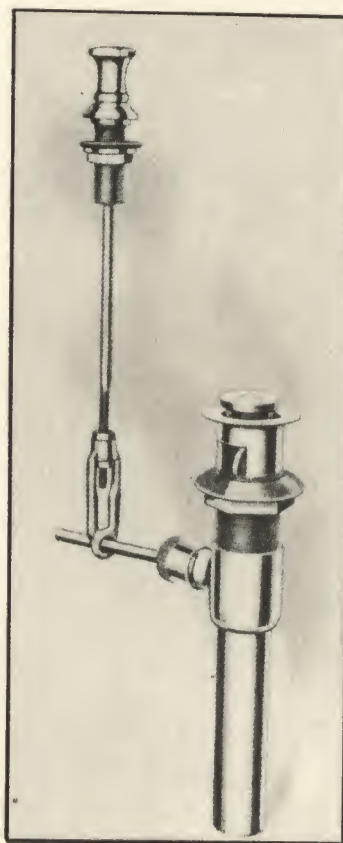
GEM LAVATORY FIXTURES



No. 7700

No. 7700 GEM Lavatory Fixture, with pop-up drain, valves with high renewable chromium plated seats and GEM 4 arm metal handles and escutcheons; $\frac{1}{4}$ " I. P. threaded tails on valves. Metal spout $3\frac{3}{4}$ " long; pop-up drain with metal knob and $1\frac{1}{4}$ " tail.

No. B 7700 Same as No 7700 except with metal spout $4\frac{3}{4}$ " long.



No. 7710

No. 7710 GEM Pop-Up Lavatory Drain, with Metal knob and escutcheons.

The Lavatory fixtures shown on this page are made up with $1\frac{1}{4}$ " Tail Pieces. If $1\frac{1}{2}$ " Tail Pieces are desired, order must specify.

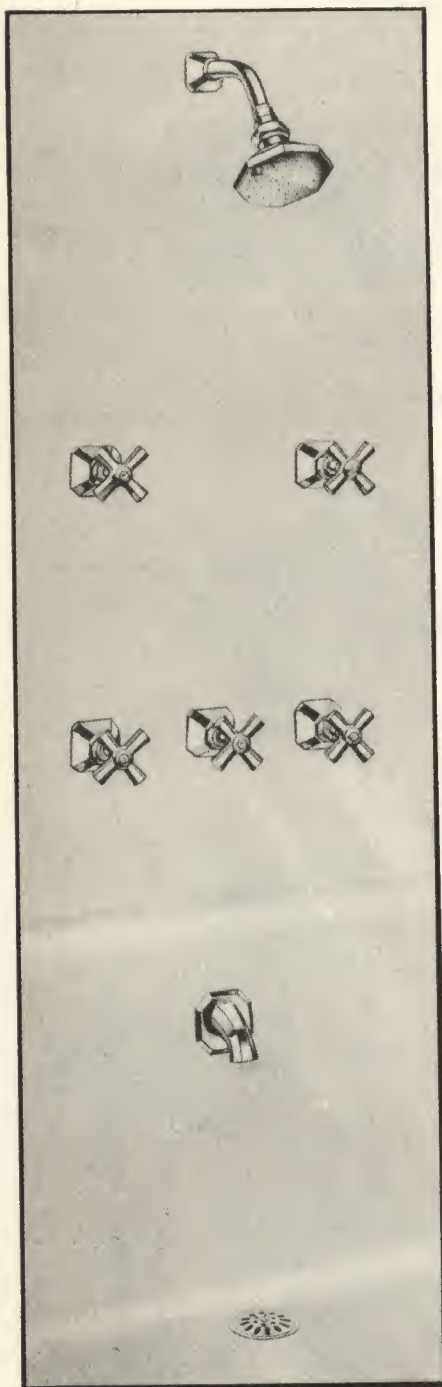
Exposed Metal Chromium Plated



Woodward Wanger Co.



GEM BATH AND SHOWER FIXTURE



No. 7715

If Bath and Shower valves are to be connected, add the letter "C" to figure number.

No. 7715

GEM Bath and Shower Fixture. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 11" C. to C. of bath, also shower valves; W-W brass unions on inlets of bath and shower valves. GEM 4-arm metal handles and escutcheons, with brass tub nozzle, 8" bent shower arm and wall flange, 4" brass shower head with ball joint, 2" standing drain.

No. B-7715

Same as No. 7715 but with shower valves 8" C. to C.

When fixtures are to be set in back wall near end or in center, order must specify.



No. 7720

No. 7720 GEM Bath Fixture. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 11" C. to C. of bath valves; W-W brass unions on inlets of valves; GEM 4-arm metal handles and escutcheons, brass tub nozzle, 2" standing drain.

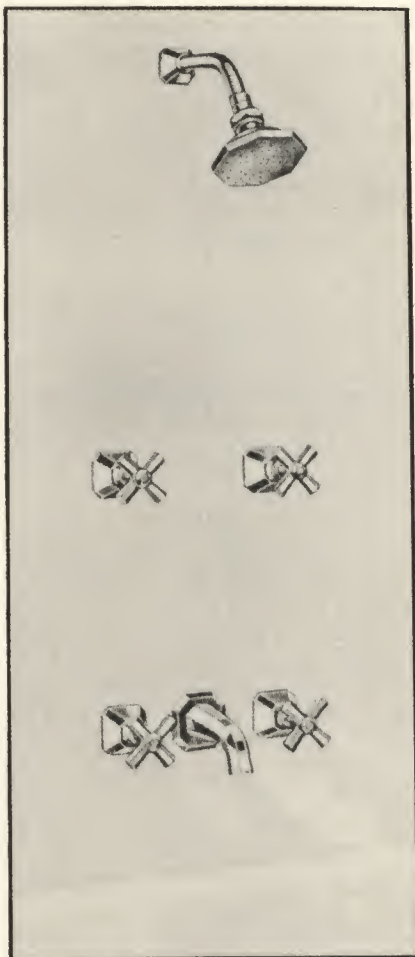
Exposed Metal Chromium Plated



Woodward Wanger Co.

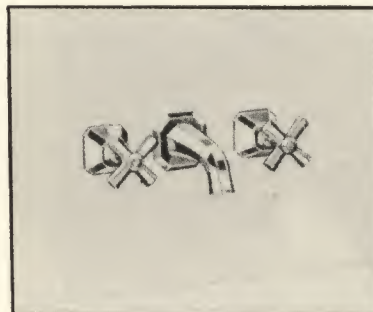


GEM BATH AND SHOWER FIXTURES



No. 7722

GEM Bath and Shower Fixture Less Waste. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 8" C. to C. of bath, also shower valves. W-W brass unions on inlets of bath and shower valves; GEM 4-arm metal button handles and escutcheons, brass over-rim nozzle, 8" bent shower arm with flange, 4" brass shower head with ball joint.



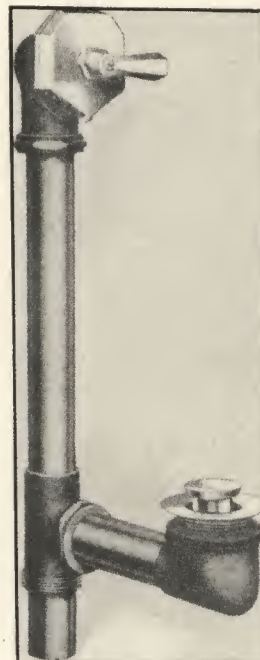
No. 7723

No. 7723 GEM Over-Rim Tub Fitter. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 8" C. to C. of valves; W-W brass unions on inlets of valves; GEM 4-arm metal button handles and escutcheons, brass over-rim nozzle.



No. 7506

When Specified, Fixtures can be furnished with Clean-spray Art Design Shower Heads.



No. 7724

Fixtures shown on this page can be furnished with Valves 11" C. to C., add the letter "S" after figure number.

If Bath and Shower valves are to be connected, add the letter "C" to figure number. **No. 7724 GEM Trip Lever Pop-Up Bath Waste.** Metal lever handle.

Exposed Metal Chromium Plated



Woodward Wanger Co.



GEM BATH AND SHOWER FIXTURE



No. 7725

If Bath and Shower valves are to be connected, add the letter "C" to figure number.

No. 7725 GEM Bath and Shower Fixture. $\frac{1}{2}$ " by-pass valves, with high renewable chromium plated seats, 11" C. to C. of bath, also shower valves; W-W brass unions on inlets of bath and shower valves; GEM 4-arm metal button handles and escutcheons, brass over-rim nozzle, 8" bent shower arm, with brass flange, 4" brass shower head with ball joint, 2" standing drain.

No. B-7725 Same as **No. 7725** but with shower valves 8" C.



No. 7730

GEM Bath Fixture. $\frac{1}{2}$ " by-pass valves, with high renewable chromium plated seats, 11" C. to C. of bath valves; W-W brass unions on inlets of valves; GEM 4-arm metal button handles and escutcheons, brass over-rim nozzle, 2" standing drain.



When Specified, Fixtures can be furnished with Clean-spray Art Design Shower Heads.

Exposed Metal Chromium Plated



Woodward Wanger Co.



GEM BATH AND SHOWER FIXTURES

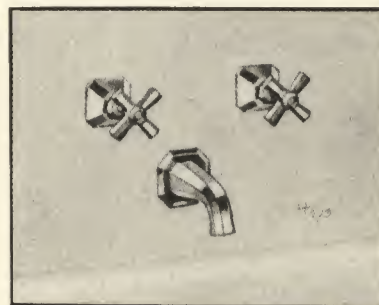


No. 7731

GEM Bath and Shower Fixture Less Waste. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 8" C. to C. of bath, also shower valves. W-W brass unions on inlets of bath and shower valves. **Bath and shower valves connected.** GEM 4-arm metal button handles and escutcheons, brass over rim nozzle, 4" below bath valves, 8" bent shower arm with flange, 4" brass shower head with ball joint.

No. B-7731

Same as **No. 7731** but less connecting pipe between Supply Tee and Nozzle.



No. 7732

GEM Over Rim Tub Filler. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 8" C. to C. of valves; W-W brass unions on inlets of valves; GEM 4-Arm metal button handles and escutcheons, brass over rim nozzle, 4" below bath valves.

No. B-7732

Same as **No. 7732** but less connecting pipes between Supply Tee and Nozzle.

Fixtures shown on this page can be furnished with Valves 11" C. to C. Add the letter "S" after figure number.

If Bath and Shower Valves are to be connected, add the letter "C" to figure number.



No. 7506

When Specified, Fixtures can be furnished with Cleanspray Art Design Shower Heads.

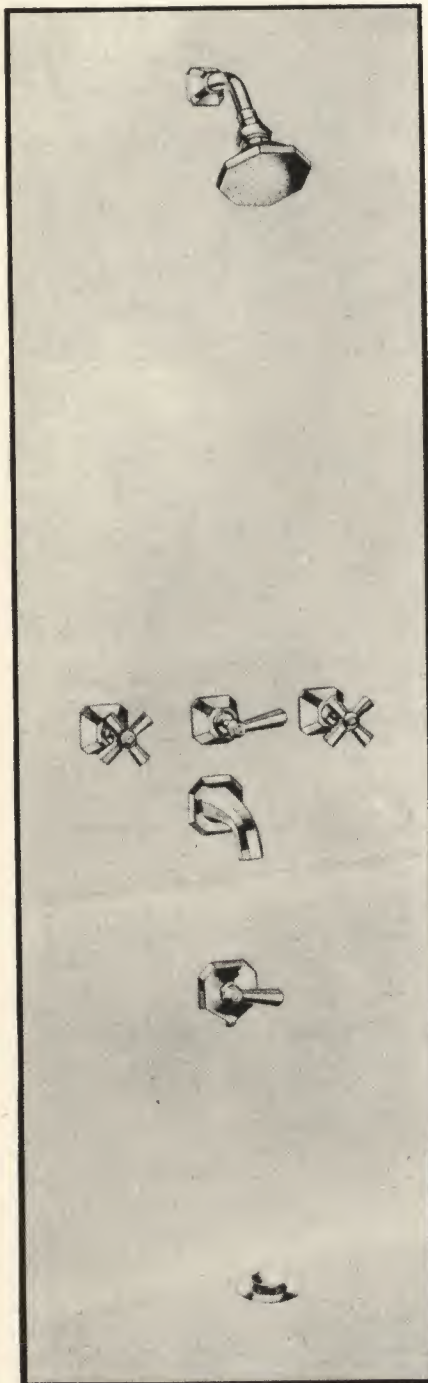
Exposed Metal Nickel or Chromium Plated



Woodward Wanger Co.



GEM BATH AND SHOWER FIXTURES



No. 7733

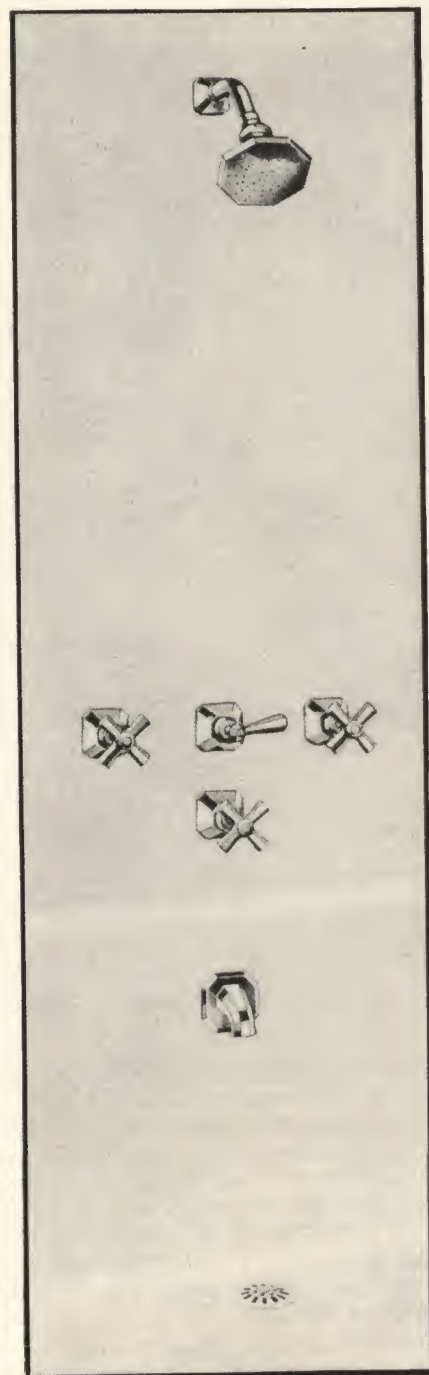
No. 7733 GEM Combination Diverting Valve Fixture, with trip lever pop-up waste (all with GEM escutcheons) Bath valves 11" C. to C. with GEM 4-arm metal button handles on control valves and GEM metal lever handle on diverting valve and trip lever waste, with brass over-rim tub nozzle, 4" shower head and arm, with brass wall flange.

No. 7734 GEM Combination Diverting Valve Fixture, with bi-transit waste, with GEM 4-arm metal button handles and escutcheons on control valves and waste. GEM metal lever handle on diverter, brass tub nozzle, 4" shower head and arm with brass wall flange.



No. 7506

When specified, clean Spray Shower Head with ball joint and volume control can be substituted.



No. 7734

When fixtures are set in back wall near end, or in center, order must specify.

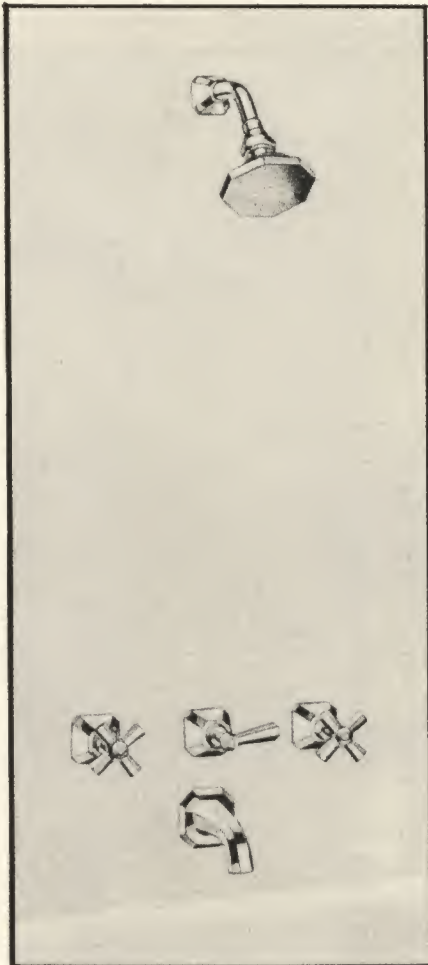
Exposed Metal Chromium Plated



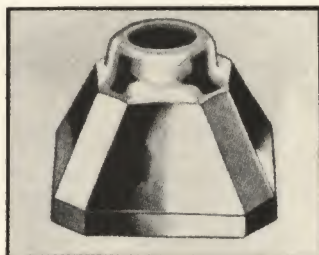
Woodward Wanger Co.



GEM BATH AND SHOWER FIXTURES



No. 7735



No. 7740
Gem Bath, Shower and
Lavatory Valve
Escutcheon

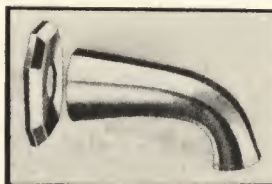
No. 7735 GEM Bath and Shower Diverting Valve Fixture Less Waste. $\frac{1}{2}$ " bath valves with high renewable chromium plated seats, 11" C. to C. of bath valves; W-W brass unions on inlets of bath valves, and with diverter for shower or tub; GEM 4-arm metal button handles, brass lever on diverter and brass escutcheons, brass over-rim nozzle, 8" bent shower arm with flange, 4" shower head with ball joint.

No. 7736 GEM Shower Fixture. $\frac{1}{2}$ " valves with high renewable chromium plated seats, 11" C. to C. of valves, W-W brass unions on inlets of valves; GEM 4-arm metal button handles and escutcheons, 8" bent shower arm with flange, 4" brass shower head with ball joint.

No. B-7736 Same as No. 7736 but with valves 8" C. to C.



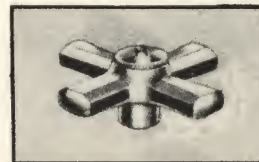
No. 7741
4" Gem Shower Head
with Integral Ball Joint



No. 7742
Gem Over-Rim Nozzle



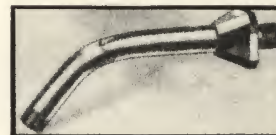
No. 7736



No. 7743
Gem Handle for Bath,
Shower and Lavatory
Valves



No. B-7742
Gem Tub Nozzle



No. 7744
8" Bent Shower Arm
with Gem Flange



Woodward Wanger Co.

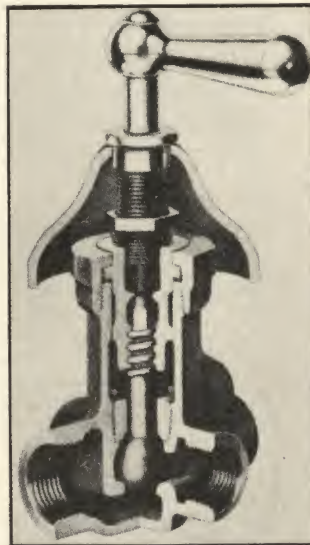


BATH AND SHOWER FIXTURES WITH DIVERTING VALVE



No. 7746

Bath and Shower Fixture, less waste. $\frac{1}{2}$ " bath valves with high renewable chromium plated seats 11" C. to C. of bath valves. W-W brass unions on inlets of bath valves, and with Diverter for Shower or Tub. Brass cross, Metal button handles, Brass lever on Diverter and Brass escutcheons, Brass over rim nozzle. 8" bent Shower arm with brass flange, Cleanspray Shower head with ball joint.



Combination Diverting Valve Fixture, with Trip Lever Pop-up Drain.

It has heavy wall lines, and is of all brass construction with ground joint valve seats on both the tub and shower outlets which afford large water way areas for both the shower and tub outlets.

A renewable thread barrel packed with a Jewett molded ring can be adjusted by loosening the outside bonnet. This will also correct slight variations in the handle.



No. 7747

Combination Diverting Valve Fixture with 2" standing drain, brass cross metal button handles on control valves and waste, metal lever handle on diverter, brass tub nozzle, 8" bent shower arm with brass flange,

Cleanspray shower head with ball joint.

Exposed Metal Chromium Plated

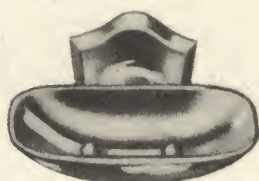


Woodward Wanger Co.



EVER-CHROME SANI-SET

FORGED BRASS—CHROME PLATED



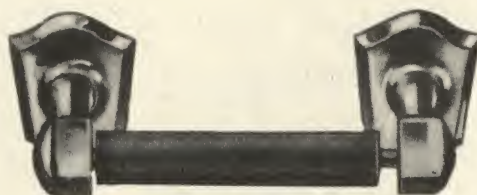
Soap Dish
No. 7802



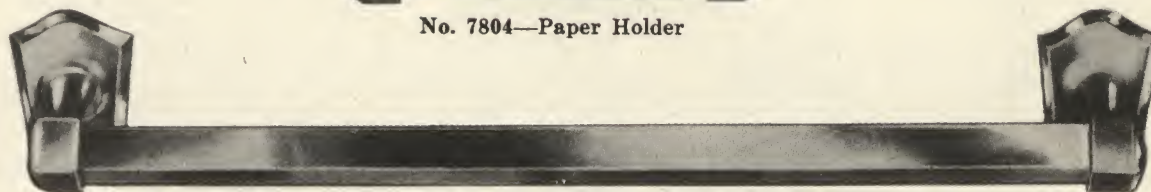
Robe Hook
No. 7801



Tumbler and Tooth Brush Holder
No. 7803

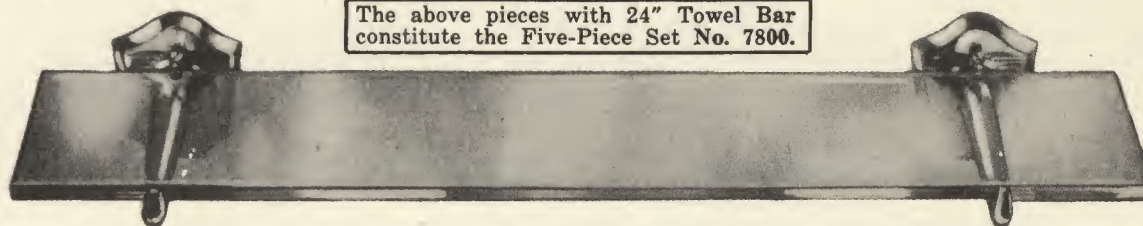


No. 7804—Paper Holder



$\frac{3}{4}$ " Square Brass Towel Bar, Chromium Plated
No. 7805-1—18" Bar No. 7805-2—24" Bar
No. 7805-3—30" Bar No. 7805-4—36" Bar

The above pieces with 24" Towel Bar
constitute the Five-Piece Set No. 7800.



No. 7806-1 Brackets with 18" Opal or Black Shelf

No. 7806-2 Brackets with 24" Opal or Black Shelf

No. 7806-3 Brackets with 30" Opal or Black Shelf

Directions for Installing



Fig. 1 Fig. 2

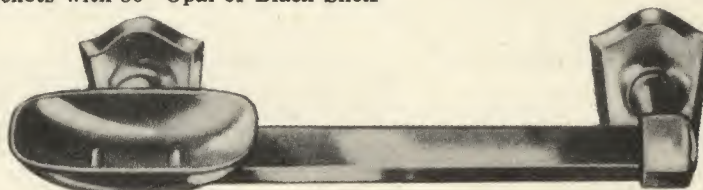


Fig. 3

Fasten concealed mounting plate to the wall (Fig. 1). Place wall shield over stud (Fig. 2). Attach fixture



to stud with concealed set screw (Fig. 3), which draws all three pieces together in a neat tightening-fitting assembly that will not work loose. They are easily and quickly installed in any type of wall construction.



No. 7807—Grab Rail
 $\frac{3}{4}$ " x 9"



Woodward Wanger Co.



EVER-WHITE SANI-SET

Smooth, sparkling white "China" Bathroom Fixtures. An exclusive design and very good looking. Strong, sturdy and durable. A damp cloth keeps fixtures bright and clean.



Soap Dish No. 7816-W



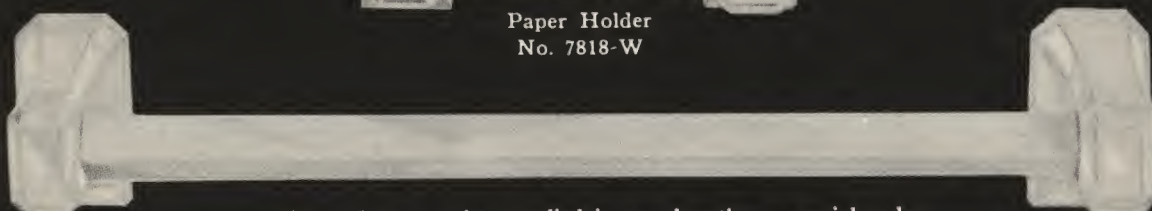
Robe Hook
No. 7815-W



Tooth Brush and Tumbler
Holder No. 7817-W



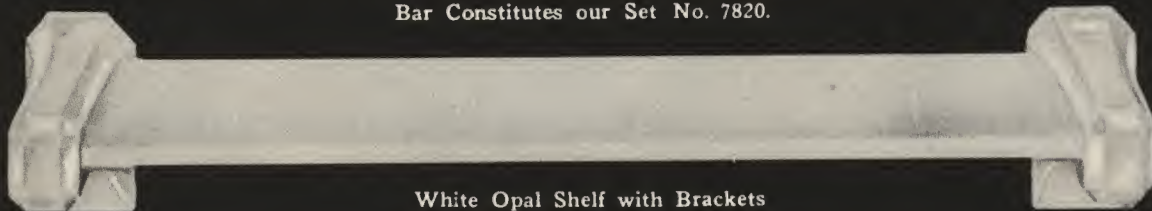
Paper Holder
No. 7818-W



Towel Bars can be supplied in any length on special order.

No. 7819-1—18" Bar No. 7819-2—24" Bar
No. 7819-3—30" Bar No. 7819-4—36" Bar

The above 5 pieces with 24" Towel
Bar Constitutes our Set No. 7820.



White Opal Shelf with Brackets
No. 7822—18" No. 7823—24"

EACH
PIECE



Slides over wedge first placed
in wall. Fit as snug and tight
as built-in-fixtures.

UNGLAZED SETS

No. 7814—5-piece unglazed set ex-
actly like set No. 7820 except for
finish. With wedges and screws.

COLORED SANI-SETS

We can supply complete five-piece
sets in Baby Blue, Green and Black.



Soap Dish Grab Rail
No. 7824-W

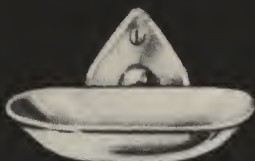


Woodward Wanger Co.



EVER-CHROME "JUNIOR" SET

CAST BRASS—CHROME PLATED



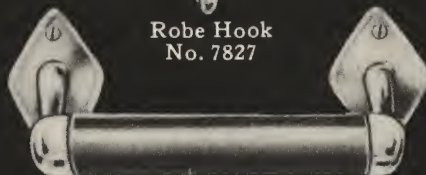
Soap Dish
No. 7829



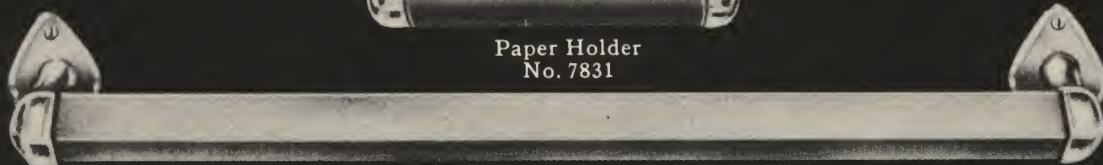
Robe Hook
No. 7827



Tooth Brush and
Tumbler Holder
No. 7830



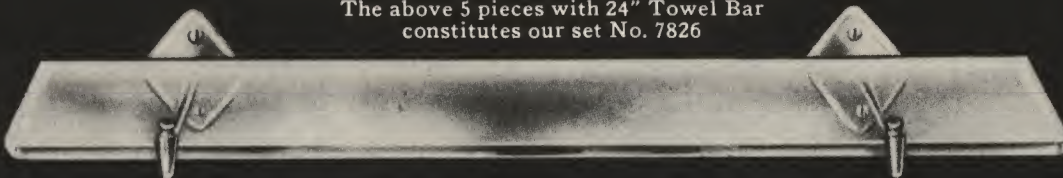
Paper Holder
No. 7831



No. 7832-1 with 18" bar
No. 7832-3 with 30" bar

No. 7832-2 with 24" bar
No. 7832-4 with 36" bar

The above 5 pieces with 24" Towel Bar
constitutes our set No. 7826



No. 7833-1 with 18" crystal shelf

No. 7833-2 with 24" crystal shelf

EVER-WHITE "JUNIOR" SET

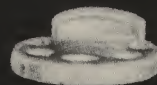
Very similar to our regular Sani-Set, only smaller and on lighter lines.



Soap Dish
No. 7837



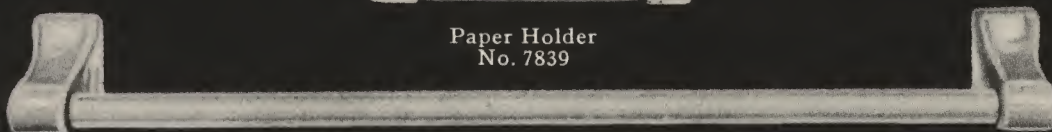
Tumbler Holder
No. 7836



Tooth Brush Holder
No. 7838



Paper Holder
No. 7839



No. 7840-1 —18" Bar

No. 7840-2 —24" Bar

The above 5 pieces with 24" Towel Bar
constitutes our set No. 7835

No. 7841-B Black "Junior" Set of 5 pieces.



Woodward Wanger Co.



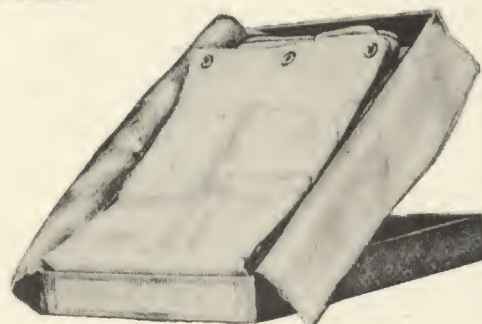
Shower Curtains

White Duck Curtains

A very good quality of pre-shrunk, 8 ounces White Duck strong serviceable material.

- No. 7849½White Duck, 36" x 72", less Hooks
 No. 7850White Duck, 66" x 72", less Hooks
 No. 7851White Duck, 72" x 72", less Hooks
 No. 7852White Duck, 78" x 72", less Hooks
 No. 7853White Duck, 108" x 72", less Hooks

We can supply 8 or even 10 ounce Duck Curtains in any size desired. Cost increases with the size and weight. Special Sanforized (non-Shrinkable) White Duck can be supplied on order.



Bath Stools



All with
White Feet

No. 7854
Ming Green

No. 7855
Black

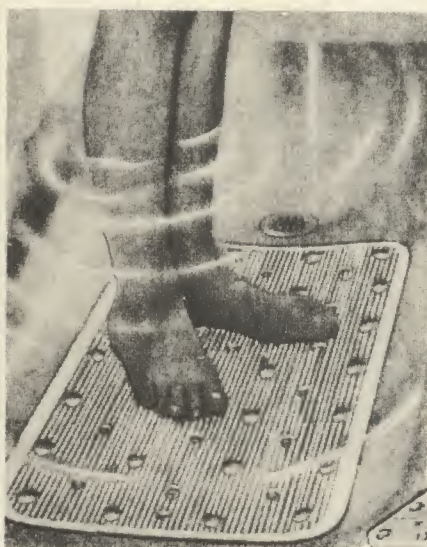
No. 7856
White

Strong, sturdy wood construction. The legs and top are of "Seamless" Pyralin. Legs white with non-skid rubber feet. Top in white or colors. Shipped knocked down. Legs screw in.

Curtain Hooks



No. 7847-C -Chromium Plated

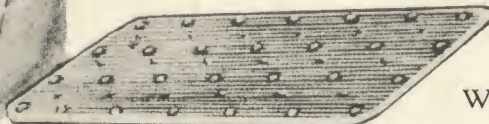


Slip-Proof Bath Rugs

More serious injuries are sustained when entering or leaving the tub than in any other spot in the home. Slip-Proof bath tub rugs are cheap insurance against slipping and falling. These rugs have surface corrugations and numerous vacuum cups that firmly grip the smooth finish of the tub.

No. 7859 16" x 30"

No. 7860 14" x 26"



No. 7859

White, Green, Yellow and Peach

No. 7860

In White only.



Woodward Wanger Co.



Porcelain Replacement Handles

CLOSED OR OPEN STYLE



1 1/2" Size			1 3/4" Size		
No.	Marked	Style	No.	Marked	Style
7863	HOT	Open	7867	HOT	Closed
7864	COLD	Open	7868	COLD	Closed
7865	HOT	Closed	2" Size		
7866	COLD	Closed	No.	Marked	Style
			7869	HOT	Closed
			7870	COLD	Closed



Four Prong Porcelain Handles



3 1/4" Size
No. 7873 — HOT
No. 7874 — COLD



2 1/4" Size
No. 7871 — HOT
No. 7872 — COLD



2 3/4" Size

No. 7875MarkedHOT
No. 7876MarkedCOLD

3 1/4" Size

No. 7877MarkedHOT
No. 7878MarkedCOLD

Porcelain Four-Prong Plain Handle

No. 7879. Same as "Standard" R-43. With hole through center. No markings. Size 3 1/4".



Woodward Wanger Co.



Porcelain Flanges



HEX PATTERN

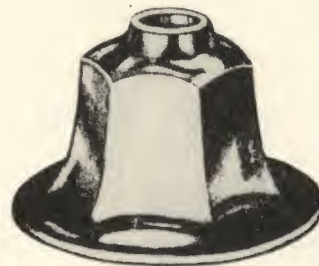
For Speakman Fixture.

No. 7880. Hex Pattern. Diameter of Top Opening $\frac{1}{2}$ ". Height $1\frac{1}{8}$ ". Diameter at Base $2\frac{1}{8}$ ".

HEX ESCUTCHEONS TO FIT SPEAKMAN FIXTURE

Chrome plated. Solid brass. Female tapped.

No.	Height	Base	Hole
7881-C	$1\frac{3}{4}$ "	$2\frac{1}{2}$ "	$\frac{5}{8}$ "



ROUND PATTERN

For Speakman Fixture.

No. 7882. Diameter of Top Opening $\frac{1}{2}$ ". Height $1\frac{1}{8}$ ". Diameter at Base $2\frac{1}{8}$ ".

No. 7883. Same with Threaded Brass Collar.



No. 7886

Flanges

No. 7886

Height $1\frac{3}{8}$ " Diameter.
At base $2\frac{1}{2}$ " Diameter
At top opening $\frac{1}{2}$ ".

No. 7887

Height $1\frac{1}{8}$ " Diameter.
At base $2\frac{1}{2}$ " Diameter
At top opening $1\frac{1}{16}$ "



No. 7887-

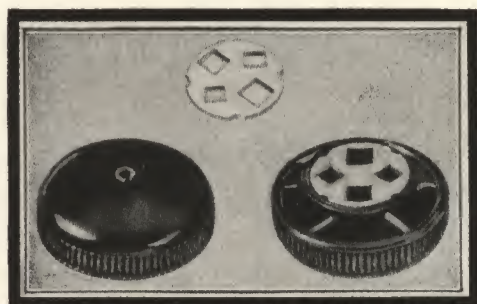


Woodward Wanger Co.



Handle Replacements—

FITS ANY POPULAR SIZE VALVE



No. 7911

Radiator Valve Handle

Black Hard Rubber Valve Handle. Diameter $2\frac{1}{4}$ in. Supplied with two (2) square brass sleeve inserts as illustrated, giving the handle three (3) different size adjustments.



No. 7910

Brass Index Handle

Chrome Handle

Length $1\frac{3}{4}$ in. Open end type. Equipped with one set screw. Marked H or C.



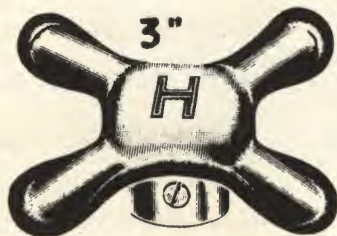
No. 7913

Two-Screw Brass Handle

Chrome Plated

Length 3 in. Marked H or C. Has two (2) set screws which hold it firmly to the stem.

Forged Brass Replacement Handle with Interchangeable Spuds



There are 8 spuds with a different broaching on each end. They will fit 16 different size stems. One extra spud is self threading.

Heavy Forged Brass Chrome Plated. This handle with assortment of 9 spuds will take care of any faucet handle replacement.

No. 7925-C for "C" Index

No. 7925-H for "H" Index

No. 7925-W for "W" Index

— Bushings —

No.	Stamped	No.	Stamped
7926	0	7931	5
7927	1	7932	6
7928	2	7933	7
7929	3	7934	8
7930	4	(The 8 is self threading)	



Woodward Wanger Co.



MARINE PEARL SEATS

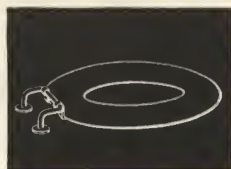


WHITE PEARL

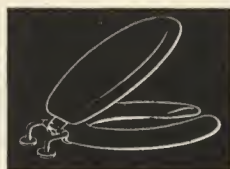
No. 7990

Square Back for Regular Bowls

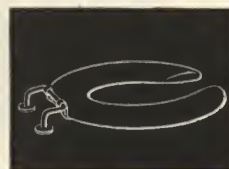
Truly a masterpiece of the seat maker's art. It is finished in lustrous, genuine duPont Mother-of-Pearl "Pyralin," over 1 1/4", hard kiln-dried Maple. Its gleaming beauty will blend with the most luxurious bathroom appointments. Chrome plated brass hinges.



No. 7990-A



No. 7990-B



No. 7990-C

MARINE PEARL SEATS

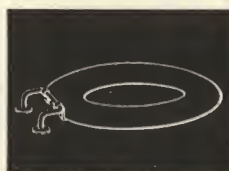


BLACK PEARL

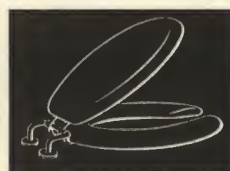
No. 7991

Square Back for Regular Bowls

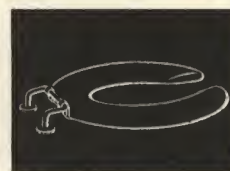
Exactly the same seat as No. 7990, except the covering is duPont Black Pyralin. It is typical of the fine hand-craftmanship used on all Woodward-Wanger Marine Pearl Seats. Chrome plated brass hinges.



No. 7991-A



No. 7991-B



No. 7991-C



Woodward Wanger Co.



MARINE PEARL SEATS

Frequently
These Colors Are Also Available



GREEN PEARL

No. 7992—Same as the Black, and White, but in Green, to fit certain bathroom color schemes.

No. 7992-A—Closed front, no lid.

No. 7992-B—Open front, with lid.

No. 7992-C—Closed front, no lid.

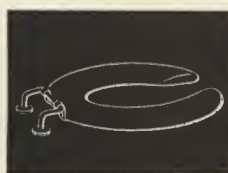
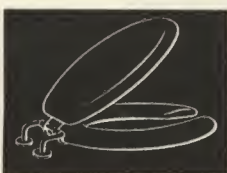
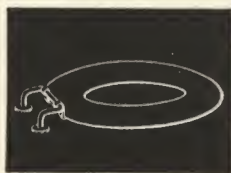
BLUE PEARL

No. 7993—Same as Black, and White, but color of Pyralin is Blue.

No. 7993-A—Closed front, no lid.

No. 7993-B—Open front, with lid.

No. 7993-C—Closed front, no lid.



ORCHID PEARL

No. 7994—Same as Black, and White, but color of Pyralin is Orchid.

No. 7994-A—Closed front, no lid.

No. 7994-B—Open front, with lid.

No. 7994-C—Open front, no lid.

ROSE PEARL

No. 7995—Same as Black, and White, but seat is covered with beautiful Rose colored pearl.

No. 7995-A—Closed front, no lid.

No. 7995-B—Open front, with lid.

No. 7995-C—Open front, no lid.



Woodward Wanger Co.



WHITE SHEET COVERED SEATS



No. 8000

CLOSED FRONT

No. 8000

Square Back for Regular Bowls

Close grained kiln-dried Maple, 1 $\frac{1}{4}$ " stock, is covered with pure white duPont Sheet Pyralin, highly polished. Chrome plated all brass bar hinge

No. 8000 $\frac{1}{2}$ —Same seat but without lid.

WHITE SHEET COVERED SEATS



No. 8002

OPEN FRONT

No. 8002

Square Back for Regular Bowl

Close grained kiln-dried Maple is covered with pure white duPont sheet Pyralin, highly polished. Chrome plated all brass bar hinge.

No. 8002 $\frac{1}{2}$ —Same seat but without lid.



Woodward Wanger Co.



WHITE SHEET COVERED SEATS



No. 8004

EXTENDED LIP, OPEN FRONT

No. 8004

For Elongated Bowls

Made from 1 $\frac{1}{4}$ " kiln-dried Maple, and covered with white duPont Pyralin, highly polished. Extra heavy brass hinge, Chrome plated.

No. 8004 $\frac{1}{2}$ —Same seat but without lid.

WHITE SPRAYED SEATS



No. 8333

CLOSED FRONT

No. 8333

Square Back for Regular Bowls

Covered with a high quality cellulose lacquer. Will not peel, craze or turn yellow. 1 $\frac{1}{4}$ " hard Maple stock and chrome plated brass bar hinge.

No. 8333 $\frac{1}{2}$ —Same seat but without lid.



Woodward Wanger Co.



WHITE SPRAYED SEATS



No. 8334

OPEN FRONT

No. 8334

Square Back for Regular Bowls

Covered with a high quality cellulose lacquer. Will not peel, craze or turn yellow. 1 $\frac{1}{4}$ " hard Maple stock and chrome plated brass bar hinge.

No. 8334 $\frac{1}{2}$ — Same seat but without lid.

WHITE SPRAYED SEATS



No. 8329

CLOSED FRONT

No. 8329

Square Back for Regular Bowl

Made from 1" kiln-dried Maple, and heavily covered with white, high grade lacquer. Brass, chrome plated bar hinge. An excellent quality low priced seat.



Woodward Wanger Co.



SOLID PLASTIC SEATS

All our solid plastic seats are moulded under 150 tons pressure into a seamless one-piece seat without joints, or seams.



CLOSED FRONT

WITH EXTENDED BACK FOR REGULAR BOWLS

No. 8068

No. 8068—Black, closed front, no lid, with concealed type hinge that perfectly matches the seat and leaves no metal exposed. The hinges are brass, covered with plastic. Rubber washers and brass wing nuts.

No. 8070—Same seat in White.



CLOSED FRONT

WITH EXTENDED BACK FOR REGULAR BOWLS

No. 8069—Black Plastic, closed front, with lid and extended back. Concealed type $\frac{3}{4}$ " offset hinges as shown. No metal exposed. Brass hinges, plastic covered. Rubber washers and brass wing nuts.

No. 8071—Same seat in White.



OPEN FRONT

WITH EXTENDED BACK FOR REGULAR BOWLS

No. 8062—Black Plastic. Open front for regular bowl. Brass hinges, plastic covered, no metal showing. Rubber washers and brass wing nuts standard equipment. $4\frac{1}{4}$ " opening in front.

No. 8066—Same seat in White.



Woodward Wanger Co.



SOLID PLASTIC SEATS

All our solid plastic seats are moulded under 150 tons pressure into a seamless one-piece seat without joints, or seams.

OPEN FRONT

WITH EXTENDED BACK FOR ELONGATED BOWLS



No. 8063—Black Plastic, open front, extended back for elongated bowls. Brass hinges covered with plastic. No metal showing. Rubber washers and brass wing nuts. Has $3\frac{1}{2}$ " opening.

No. 8067—Same seat in White.

CLOSED FRONT

WITH EXTENDED BACK FOR REGULAR BOWLS



No. 8072—Black Plastic, with lid. Concealed type $\frac{3}{4}$ " offset hinge as shown. Brass hinges, plastic covered with no metal exposed. Rubber washers and brass wing nuts. Black only.

CLOSED FRONT

WITH EXTENDED BACK FOR REGULAR BOWLS



No. 8073—Black Plastic, with concealed type $\frac{3}{4}$ " offset hinge as shown. Brass hinges, plastic covered with no metal showing. Rubber washers and brass wing nuts standard equipment. Black only.



Woodward Wanger Co.



SOLID PLASTIC SEATS

All our solid plastic seats are moulded under 150 tons pressure into a seamless one-piece seat without joints, or seams.



OPEN FRONT

WITH EXTENDED BACK FOR REGULAR BOWLS

No. 8074—Black Plastic. Concealed type $\frac{3}{4}$ " offset hinge as shown. Has $4\frac{3}{8}$ " opening in front. Brass hinges plastic covered. Rubber washers and brass wing nuts. Black only.



OPEN FRONT

WITH EXTENDED BACK FOR REGULAR BOWLS

No. 8075—Black Plastic. Concealed type $\frac{3}{4}$ " offset hinges of brass, plastic covered. Has $4\frac{3}{8}$ " opening in front. Rubber washers and brass wing nuts.

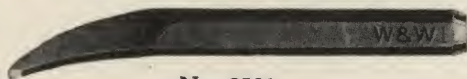


Woodward Wanger Co.



Quality Tools

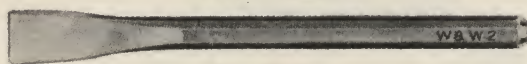
Bent Picking Chisel



No. 8501

No. 8501.....8 in. long

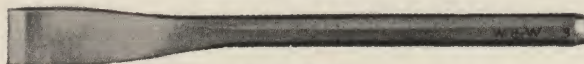
Brick Chisel



No. 8502

No. 8502..... $\frac{1}{2}$ in. x 10 in. long

Brick Chisel



No. 8503

No. 8503..... $\frac{5}{8}$ in. x 12 in. long

No. 8503 $\frac{1}{2}$ $\frac{3}{4}$ in. x 24 in. long

Cape Chisel



No. 8504

No. 8504..... $\frac{1}{2}$ in. x $7\frac{1}{2}$ in. long

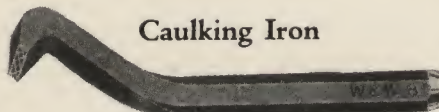
Caulking Iron, Double



No. 8506

No. 8506.....10 in. long

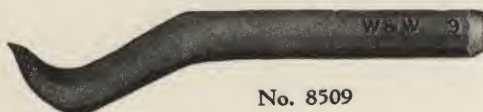
Caulking Iron



No. 8508

No. 8508..... $\frac{1}{8}$ in. bend, outside 6 in. long

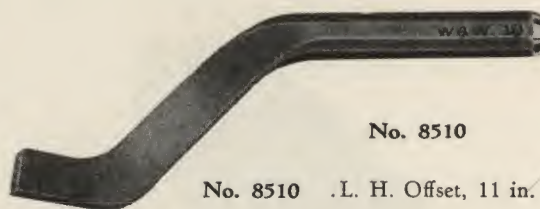
Caulking Iron



No. 8509

No. 8509..... $\frac{1}{8}$ in. bend, inside, 6 in. long

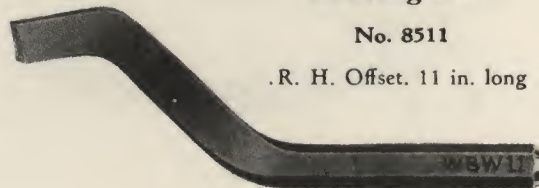
Caulking Iron



No. 8510

No. 8510 .L. H. Offset, 11 in. long

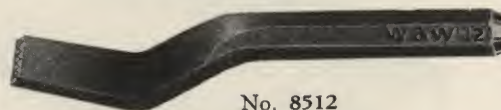
Caulking Iron



No. 8511

.R. H. Offset, 11 in. long

Caulking Iron



No. 8512

No. 8512.....9 in. long

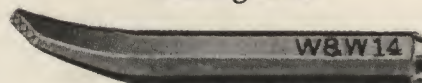
Caulking Iron



No. 8513

No. 8513.....Short, $6\frac{3}{4}$ in. long

Caulking Iron



No. 8514

No. 8514.....Outside stub, 5 in. long



Woodward Wanger Co.



Quality Tools

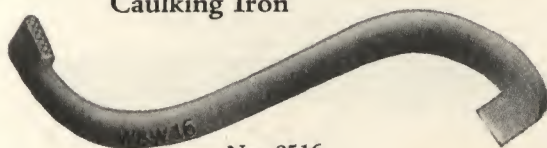
Caulking Iron



No. 8515

No. 8515.....Inside stub, 5 in. long

Caulking Iron



No. 8516

No. 8516....."S" shape

Cold Iron Chisel



No. 8517

No. 8517.....1/2 in. x 6 in. long

Cold Iron Chisel



No. 8518

No. 8518.....3/4 in. x 7 1/2 in. long

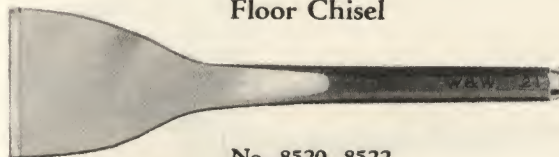
Diamond Nose Chisel



No. 8519

No. 8519.....7 in. long

Floor Chisel



No. 8520 8522

No. 8520.....5/8 in. x 10 in. x 2 in.

No. 8521.....5/8 in. x 11 in. x 2 1/2 in.

No. 8522.....1 1/8 in. x 12 in. x 3 in.

Gasket Iron



No. 8523

No. 8523.....1/8 in. bend, 7 in. long

Gasket Iron

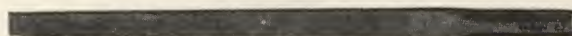


No. 8524.....5/8 in. x 12 in. long

No. 8525.....5/8 in. x 15 in. long

No. 8526.....5/8 in. x 17 in. long

Spring Gasket Iron



No. 8527

No. 8527.....5/8 in. x 18 in. long

Heavy Curved Packing Chisel



No. 8528

No. 8528.....5/8 in. x 7 1/2 in. x 1 1/2 in.

Round Nose Chisel



No. 8529

No. 8529.....7 in. long



Woodward Wanger Co.



Quality Tools

Star Drill

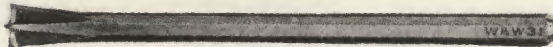


No. 8530

No. 8530..... $\frac{3}{4}$ in. x 12 in. x 1 in.

No. 8530 $\frac{1}{2}$ $\frac{3}{4}$ in. x 24 in. x 1 in.

Star Drill



No. 8531

No. 8531..... $\frac{1}{2}$ in. x 12 in. x $\frac{3}{4}$ in.

No. 8531A..... $\frac{1}{4}$ in. x 12 in. x $\frac{3}{8}$ in.

No. 8531B..... $\frac{3}{8}$ in. x 12 in. x $\frac{1}{2}$ in.

Straight Joint Chisel



No. 8532

No. 8532.....9 in. long

Wood Chisel



No. 8533

No. 8533..... $\frac{3}{4}$ in. x 10 in. long

No. 8533 $\frac{1}{2}$ $\frac{1}{2}$ in. x 9 in. long

Wood Chisel



No. 8534

No. 8534..... $\frac{5}{8}$ in. x 11 in. x 1 in.

No. 8534 $\frac{1}{2}$ $\frac{5}{8}$ in. x 10 $\frac{1}{4}$ in. x 1 $\frac{1}{4}$ in.

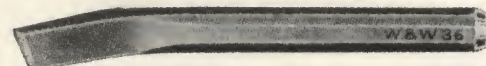
Wood Gouge



No. 8535

Outside bevel, $\frac{5}{8}$ " x 12" x 1 $\frac{1}{8}$ "

Caulking Iron



No. 8536

No. 8536.....Outside, 7 in. long

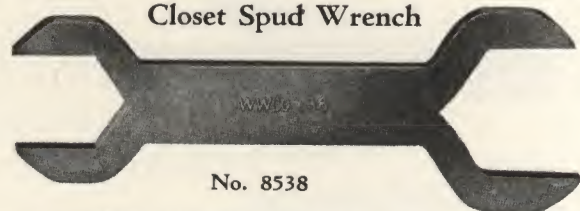
Caulking Iron



No. 8537

No. 8537.....Inside, 7 in. long

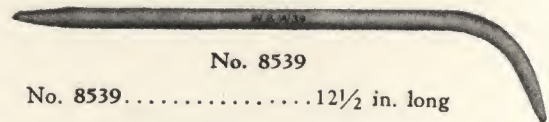
Closet Spud Wrench



No. 8538

No. 8538—(Highly Tempered Steel—Jaws will not spring), 11 $\frac{1}{2}$ in. long—sizes 1 $\frac{1}{4}$ in. and 2 in.

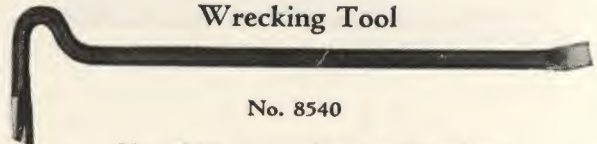
Bending Pin



No. 8539

No. 8539.....12 $\frac{1}{2}$ in. long

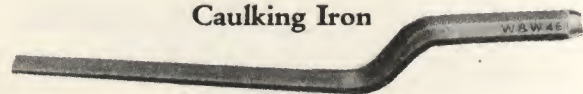
Wrecking Tool



No. 8540

No. 8540..... $\frac{3}{4}$ in. x 30 in. long

Caulking Iron



No. 8544.....R. H. Offset, 15 $\frac{1}{2}$ in. long

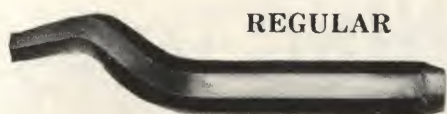
No. 8545.....L. H. Offset, 15 $\frac{1}{2}$ in. long



Woodward Wanger Co.

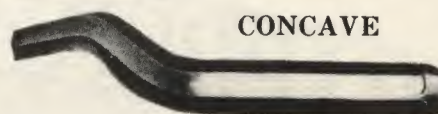


Water Main Caulking Tools



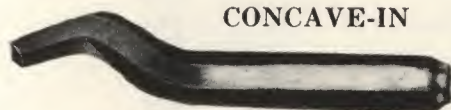
REGULAR

Nos. 8551-A-B-C-D-E-F-G-H-I



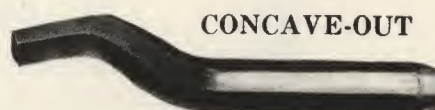
CONCAVE

Nos. 8552-A-B-C-D-E-F-G-H-I



CONCAVE-IN

Nos. 8553-A-B-C-D-E-F-G-H-I



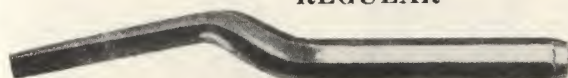
CONCAVE-OUT

Nos. 8554-A-B-C-D-E-F-G-H-I

Any Catalog Number Plus	A	B	C	D	E	F	G	H	I
Blade Thickness	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$
Blade Width	1	1	1	1	1	1	1	1	1
Stock	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$
Length	$6\frac{3}{4}$	$6\frac{3}{4}$	$6\frac{3}{4}$	$6\frac{3}{4}$	$6\frac{3}{4}$	$6\frac{3}{4}$	$6\frac{3}{4}$	$6\frac{3}{4}$	$6\frac{3}{4}$

The catalog number designates the style of tool and the letter following the number designates the width, thickness and length.

Water Main Yarning Tools



REGULAR

No. 8555-A No. 8555-B

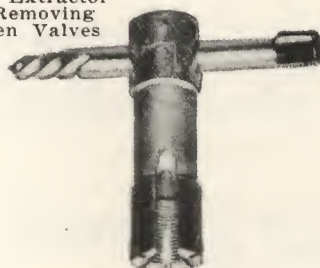


CONCAVE

No. 8556-A No. 8556-B

Number with A or B	A	B
Blade Thickness	$\frac{1}{16}$	$\frac{1}{8}$
Blade Width	1	1
Stock	$\frac{7}{8}$	$\frac{7}{8}$
Length	$10\frac{3}{4}$	$10\frac{3}{4}$

Screw Extractor
for Removing
Broken Valves



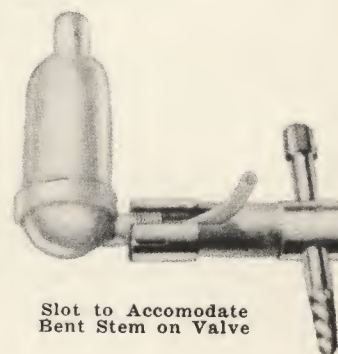
$\frac{1}{2}$ " Pipe Die for
Re-threading Valves

$\frac{1}{8}$ " Pipe Tap
for Retapping Hole
in Radiator

Radiator Tool

No. 8565

Here is a handy little Radiator tool that every Plumber and every Journeyman should carry. Has many uses and eliminates carrying several tools. Also useful on Oil Burner repair Jobs.



Slot to Accomodate
Bent Stem on Valve



Woodward Wanger Co.



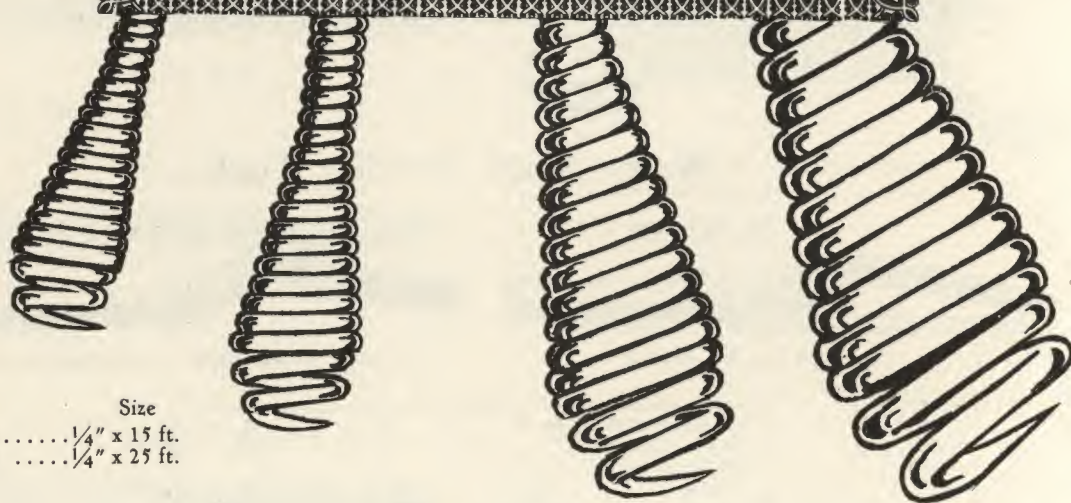
"CLIPPER" CLEANING WIRES

SWEDISH STEEL

These wires are made from imported Swedish Steel. They are heat treated and case hardened. They flex easily, take sharp bends readily, yet spring back quickly to their original shape. Before shipping each wire is "stretched" to remove all false stiffness, so it arrives ready for use. As good as a wire can be made.

WOODWARD-WANGER COMPANY

PHILADELPHIA, PENNA.



No.	Size
8566	 $\frac{1}{4}$ " x 15 ft.
8566-A	 $\frac{1}{4}$ " x 25 ft.

No.	Size
8567	 $\frac{5}{16}$ " x 15 ft.
8567-A	 $\frac{5}{16}$ " x 25 ft.
8567-B	 $\frac{5}{16}$ " x 50 ft.

No.	Size
8568	 $\frac{3}{8}$ " x 15 ft.
8568-A	 $\frac{3}{8}$ " x 50 ft.
8568-B	 $\frac{3}{8}$ " x 75 ft.

No.	Size
8569	 $\frac{1}{2}$ " x 25 ft.
8569-A	 $\frac{1}{2}$ " x 50 ft.
8569-B	 $\frac{1}{2}$ " x 75 ft.

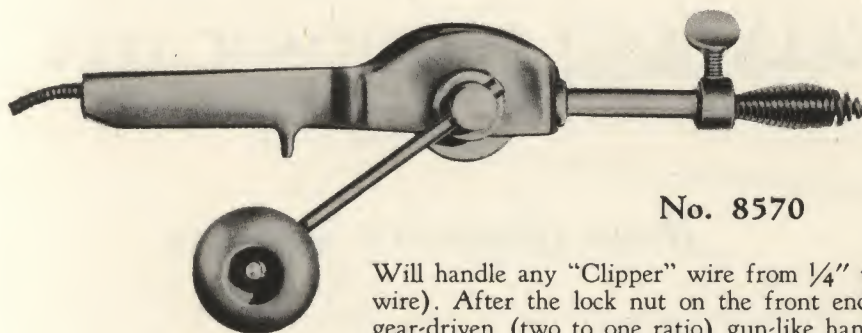
All these wires, except the $\frac{1}{2}$ " size can be used in "Speed Drive" No. 8570 and the Container No. 8571. The $\frac{1}{2}$ " wire is too large to be handled in these units.



Woodward Wanger Co.



"CLIPPER" SPEED DRIVE



No. 8570

Will handle any "Clipper" wire from $\frac{1}{4}$ " to $\frac{3}{8}$ " (but not the $\frac{1}{2}$ " wire). After the lock nut on the front end is set down tight, this gear-driven (two to one ratio) gun-like handle keeps the wire turning rapidly as it works its way into the pipe. Due to the rapid turning of the wire and the improved pointed head, it quickly digs and cuts its way through the obstruction in the pipe.

"CLIPPER" WIRE CONTAINER



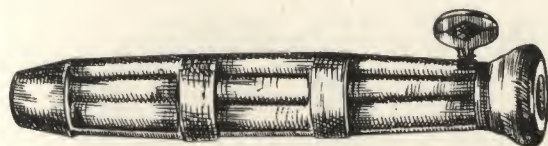
No. 8571

No. 8571

Makes the transportation of wires quick and easy. It permits carrying 25 ft. or 50 ft. wires (all but the $\frac{1}{2}$ " into the home in a clean, sanitary manner. Wires always under control, no flipping around on the floors, scratching furniture or wallpaper or marking the rugs. Keeps wires in better condition too and prevents the possibility of their kinking or being dented by lying around the shop or the floor of the truck.

Entering homes with this kind of modern equipment builds respect in the customer's mind for your up-to-dateness and your efficiency. It's the modern and sanitary way to carry cleaning wires.

"Push" Handle



No. 8573

No. 8573—A $5\frac{1}{2}$ " Aluminum handle with no-slip Grip for pushing wires into drains. Lock Nut prevents the handle from slipping.

ROTARY HANDLE



No. 8574

No. 8574—Rotary handle, equipped with set screw for holding wire. Rotary motion of handle then turns wire going into drain.

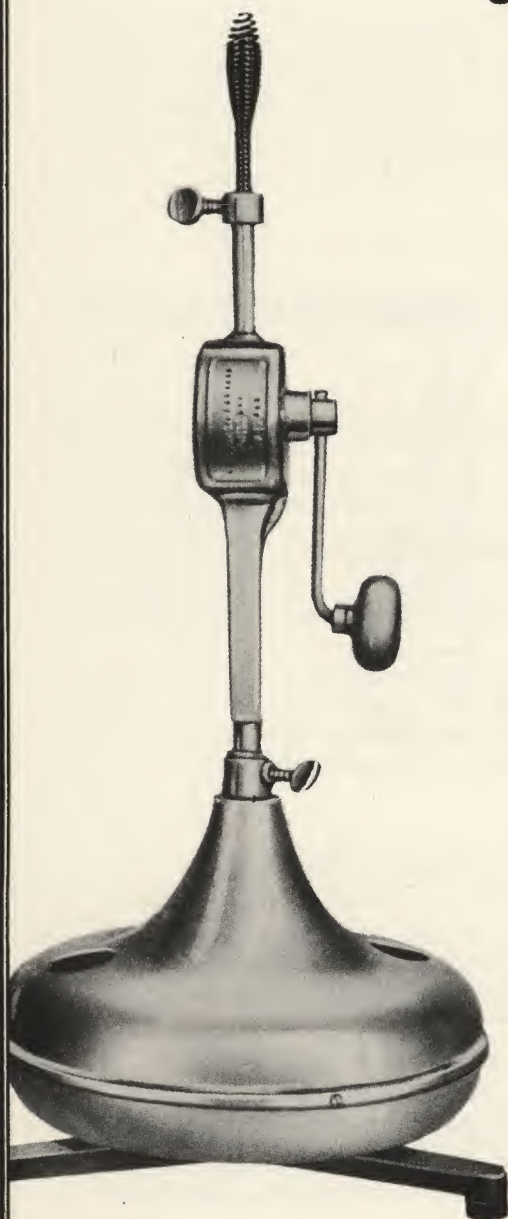


Woodward Wanger Co.



DO CLEANOUT JOBS MORE QUICKLY AND ECONOMICALLY

Three Popular Groups



No. 8570—Speed Drive
No. 8571—Wire Container
No. 8567-A—5/16" x 25 ft. Wire

No. 8570—Speed Drive
No. 8571—Wire Container
No. 8566—1/4" x 15 ft. Wire
No. 8567-A—5/16" x 25 ft. Wire

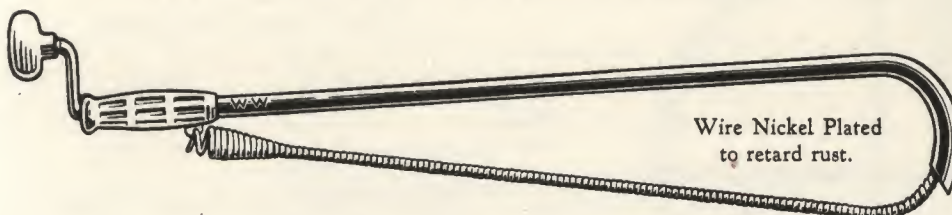
No. 8570—Speed Drive
No. 8571—Wire Container
No. 8566—1/4" x 15 ft. Wire
No. 8567-A—5/16" x 25 ft. Wire
No. 8568-B—3/8" x 50 ft. Wire



Woodward Wanger Co.



Husky Closet Auger



Wire Nickel Plated
to retard rust.

No. 8575

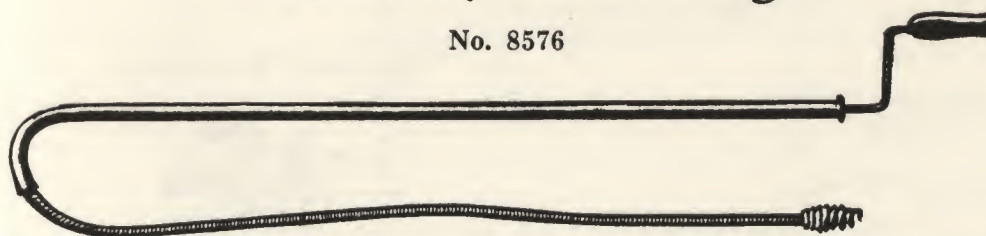
A light but strong and rugged Closet Auger. It weighs about $3\frac{1}{4}$ lbs., and is easy to handle. The seamless casing is "Sheridized" and the inside of the casing or tube is coated with asphaltum to make the casing as nearly rust-proof as possible.

Approximately three feet of Swedish steel (special winding) make this one of the toughest and strongest wires made. It is designed and built especially to take closet bowl bends and stand plenty of abuse.

Every wire is nickel plated to retard rust, and this greatly increases the life of the wire. The head on this wire is not welded on, it is a continuation of the wire itself. In other words the wire and head are all one piece.

Economy Closet Auger

No. 8576



Made with Seamless Steel tubing, wooden handle. A well made and very serviceable Closet Auger, made for those who desire a good auger at an inexpensive price. Supplied with barrel type spring head welded on.



Special 100 Foot Wire, $\frac{15}{64}$ "

No. 8566-B

This special 100 foot wire is $\frac{15}{64}$ " in diameter, made of Swedish Steel. It has no head on either end as the diameter is so small it is difficult to put a head on it. Used for water service cleaning and other purposes. Can be used on "Whirlwind" electric water service machines.



Woodward Wanger Co.



"CLIPPER" CLEANING RODS

With Brass Ball Head

No.	Width	Thick- ness	Length	Dia. of Head
8579-R	1/4"	x 1/16"	25 ft.	1/2"
8580-R	1/4"	x 1/16"	50 ft.	1/2"

"R" after number are supplied only with Reel.

With Revolving Roller Head or Revolving Spear Point Head

No.	Width	Thick- ness	Length	Dia. of Head
8581-R	1/2"	x 1/16"	25 ft.	1"
8582-R	1/2"	x 1/16"	50 ft.	1"
8583	3/4"	x 1/8"	25 ft.	1 1/2"
8584	3/4"	x 1/8"	50 ft.	1 1/2"
8585	3/4"	x 1/8"	75 ft.	1 1/2"
8586	3/4"	x 1/8"	100 ft.	1 1/2"
8587	1 1/4"	x 1/8"	75 ft.	2 7/8"
8588	1 1/4"	x 1/8"	100 ft.	2 7/8"

Those with "R" after number are supplied only with Reel.

Reel or Holder for Rods

No. 8589-A	for 1/4" Rods
No. 8589-B	for 3/4" Rods
No. 8589-C	for 1 1/2" Rods
No. 8589-D	for 1 1/4" Rods

Revolving Iron Head



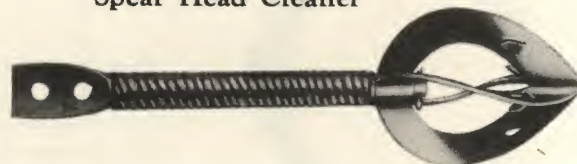
No. 8591	1" O.D. for 1/2" Rods
No. 8591-A	1 1/2" O.D. for 3/4" Rods
No. 8591-B	2 7/8" O.D. for 1 1/4" Rods

Revolving Spear Head



No. 8592	1 1/4" O.D. for 1/2" Rods
No. 8592-B	2 3/4" O.D. for 3/4" to 1 1/4" Rods

Spring Shank Spear Head Cleaner



No. 8592-C	 10 in. long
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Woodward Wanger Co.

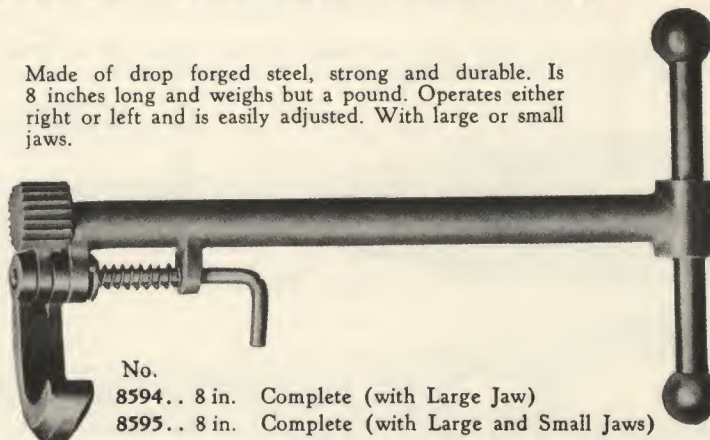


Andree Basin Wrench

**REVERSIBLE JAW
OPERATES EITHER
RIGHT OR LEFT**

Made of drop forged steel, strong and durable. Is 8 inches long and weighs but a pound. Operates either right or left and is easily adjusted. With large or small jaws.

No. Part
8595-A—Small Jaw
8595-B—Large Jaw
8595-C—Bolt
8595-D—Spring
8595-E—Pin
8595-F—Washer

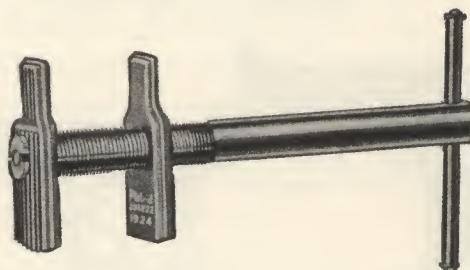


No.
8594.. 8 in. Complete (with Large Jaw)
8595.. 8 in. Complete (with Large and Small Jaws)

Closet Spud Holder and Nipple Holder Combined

**ADAPTED FOR ALL SIZES
OF CLOSET SPUDS**

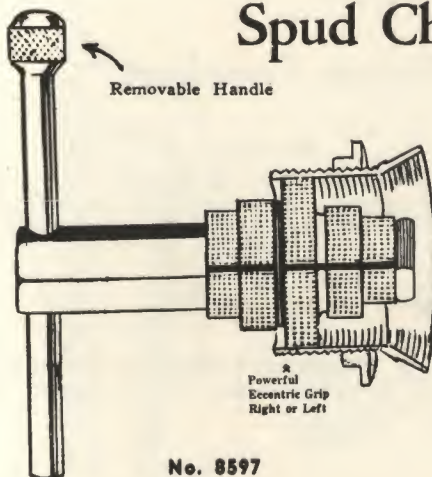
Jaws
Drop
Forged
from
Tool Steel



**Handiest
Internal
Gripping
Tool
Ever
Devised**

No. Description
8596..... Closet Spud Holder and Nipple Holder, Combined

Spud Chuck or Nipple Extractor

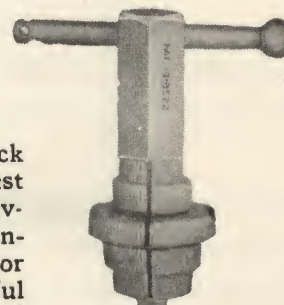


Removable Handle

Powerful
Eccentric Grip
Right or Left

No. 8597

Designed for internal holding on hollow work. Invaluable for holding Closet Bowl Spuds, of any size, hence the name, Spud Chuck. This Spud Chuck will hold equally well against right or left pressure in removing or replacing fixtures. Entirely free from threads or gears. It expands by powerful eccentric action. All steel and plated to resist rust. Should last a lifetime.



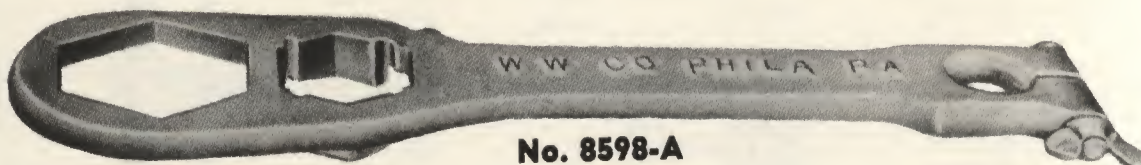


Woodward Wanger Co.

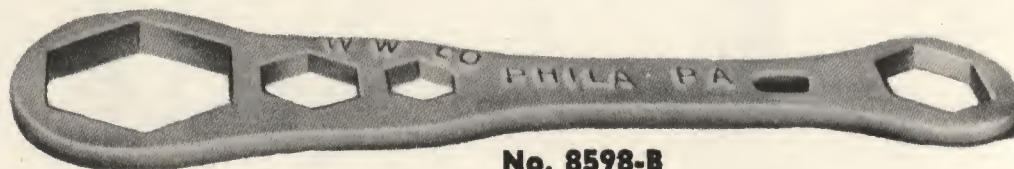


Sloan Valve Tools

Tools made especially for repair work on Sloan Valves. This pair of Wrenches are designed especially for disassembling Sloan Valves for repair work. Both are needed. Order in pairs.



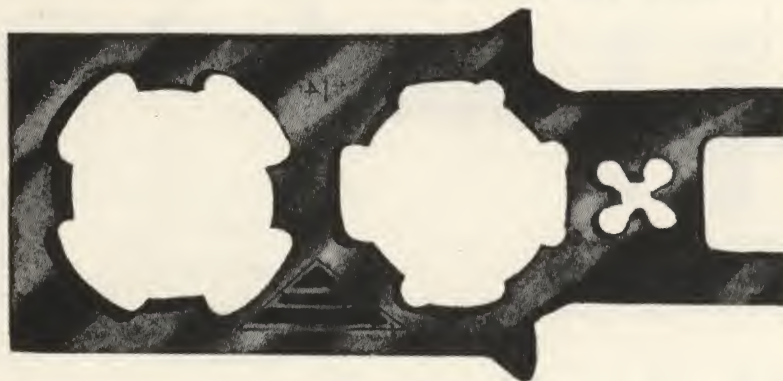
No. 8598-A



No. 8598-B

No. 8598—Set of Two Tools. Use "A" and "B" if ordered separately.

Emergency Tool

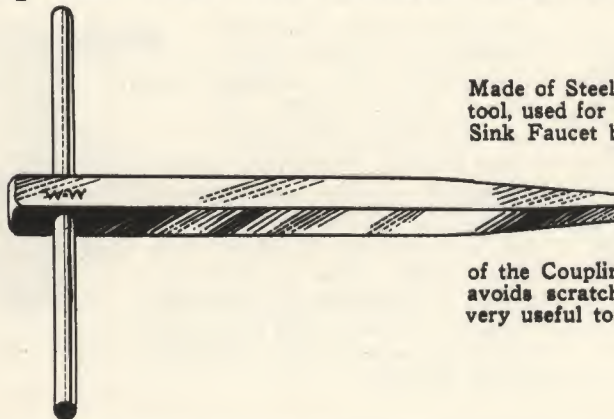


No. 8599

An Improved 6-in-1 tool with recessed guides.

1. Die for cutting $1\frac{1}{2}$ " tubes.
 2. Die for cutting $1\frac{1}{4}$ " tubes.
 3. Die for Ballcock Rods.
 4. Wrench for $1\frac{1}{4}$ " Closet Bowl Spud.
 5. Wrench for 2" Closet Bowl Spud.
 6. Key Wrench for Waste, etc.
- Made of Tool Steel

Special Tool for Double Sink Faucet Couplings



No. 8600

Made of Steel. Length $7\frac{3}{4}$ ", diameter $\frac{1}{2}$ ". A special tool, used for tightening up the couplings on a Double Sink Faucet by inserting the end in the square Hole

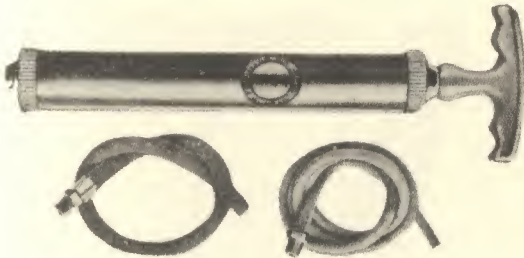
of the Coupling. Eliminates the use of a wrench and avoids scratching outside plating on the fixture. A very useful tool.



Woodward Wanger Co.



Force and Suction Pumps



Drain and Suction Pump

No. 8630

For draining bath, basin and sink traps, also Closet Bowls when houses are being closed for the season. A real time saver. The small rubber hose will pass through the holes in sink strainer and the pump quickly removes all water in the trap. The larger hose is designed to clear out syphon jet in bowls.

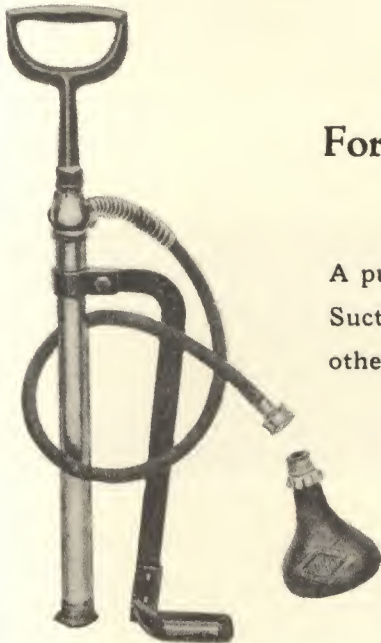
Strongly made with heavy gauge Brass barrel $1\frac{1}{2}$ " O.D. and 9 inches long, polished and lacquered. Heavy cast tee handle in Cadmium finish.

Boxed separately.

Force and Suction Pump

No. 8631

A pump that will clear out plumbing stoppages in the home quickly and efficiently. Has $1\frac{1}{2}$ " O.D. x 9 inches. Rubber cup $4\frac{5}{8}$ ". Use water and operate the pump with both force and suction action of the plunger. On the upstroke it creates a powerful suction, and a tremendous pressure on the down stroke. The suction action breaks up or dislodges the stoppage in the line.



Force and Suction Pump

No. 8632

A pump with a dual purpose. Can be used as a force pump—or a Suction Pump. Some Plumbers use it for pumping Leakure and other boiler liquids, from a bucket to the Heating System, through the Boiler drain valve.

It can also be used with Plumber's Friend or Force Cup, for clearing out clogged up Basin, Bath and Sink drains. This Pump is very strongly built of Brass and Bronze, with heavy cast iron handle and stirrup. There is constant need for such a pump in every plumbing shop.



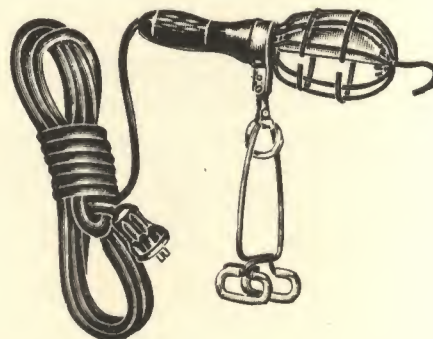
Woodward Wanger Co.



Extension Light and Cord

Trouble Light and Cord

A real high-grade Trouble Light. Supplied with 25 ft. of heavily insulated rubber cord, a reflector shade inside the wire guard, hook at end of wire guard for hanging up on pipes or nails and also a ball joint rubber insulated clamp grip, for holding fast in those out-of-the-way places. Strong and sturdily built.

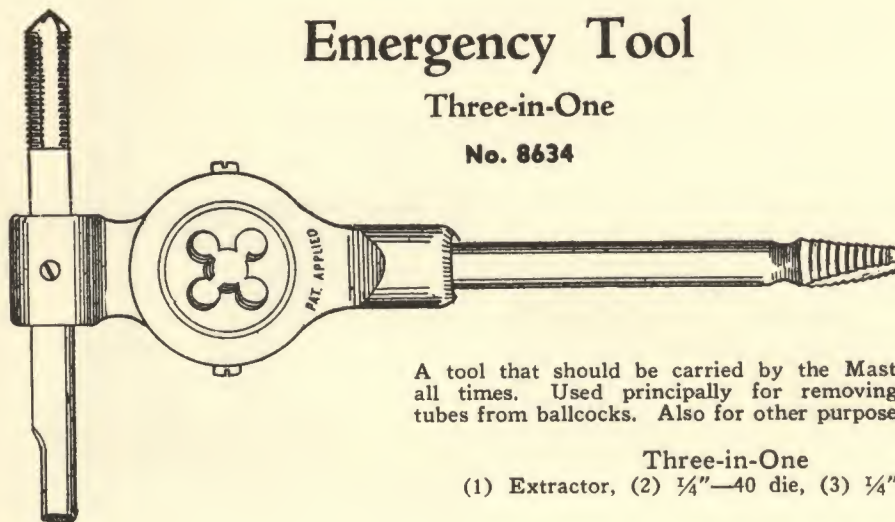


No. 8633 25 ft. Cord
No. 8633-A 50 ft. Cord

Emergency Tool

Three-in-One

No. 8634



A tool that should be carried by the Master Plumber at all times. Used principally for removing broken refill tubes from ballcocks. Also for other purposes.

Three-in-One

(1) Extractor, (2) $\frac{1}{4}$ "—40 die, (3) $\frac{1}{4}$ "—40 tap

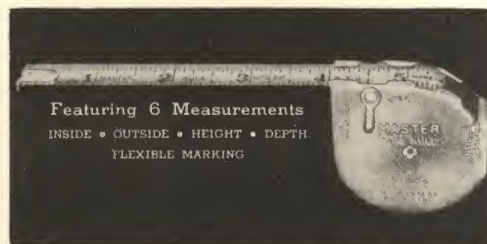
Aluminum Level



No. 8635

Die cast aluminum, length 9", width $\frac{5}{8}$ ", height $1\frac{1}{4}$ ". Weight 4 ozs. One plumb, one level and 45° vial with colored fluid, accurately marked. Grooved bottom for use on shafting. Top plate polished, satin finished sides. A pocket size all purpose level. Light, accurate and strong.

Master Rule Tape



No. 8636

Light and handy to carry in the pocket. Flexible metal rule, 72 in. long. With it you can make inside measurements, outside measurements, Height gauge, Depth gauge. Has precision lock.



Woodward Wanger Co.



Tools for Lead Work

Drift Plugs

Lignum Vitae



No.	Diameter	Length
8653	1 in.	3 in.
8654	1 1/4 in.	3 in.
8655	1 1/2 in.	3 in.
8656	2 in.	4 in.

Turn Pins

Lignum Vitae



No.	Length	Largest Diameter
8660	3 in.	1 3/4 in.
8661	3 1/2 in.	2 in.
8662	4 in.	2 1/4 in.

Lead Dresser

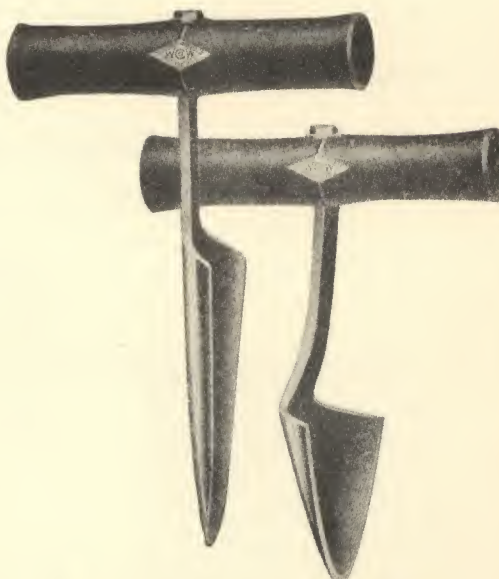
Lignum Vitae



No.	Length Over All
8669	11 1/2 in.

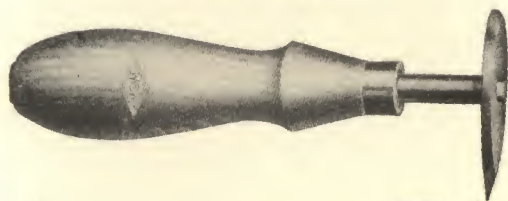
Tap Borers

Short and Long Patterns



Shave Hooks

Oval and Triangular



No.	Shape
8670	Oval
8671	Triangular

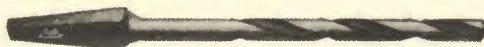
No.	Description
8672	Short (New York) Pattern
8673	Long (Philadelphia) Pattern



Woodward Wanger Co.



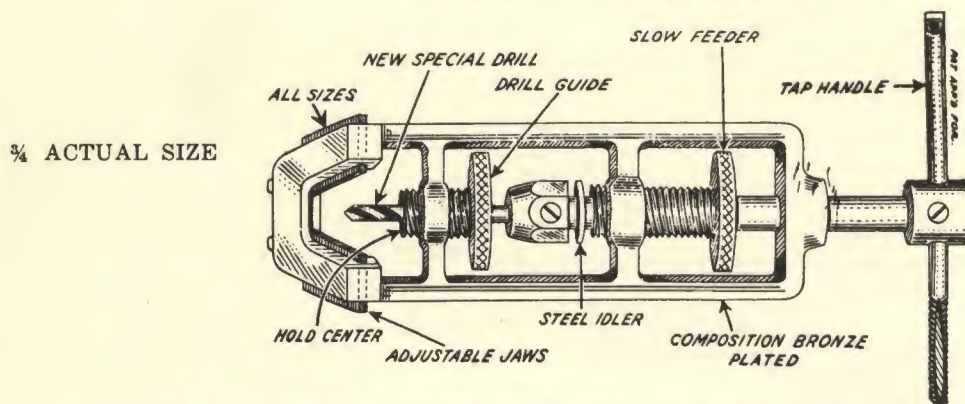
Twist Drills and Hand Drills



No.	Size	No.	Size
8677.....	$\frac{1}{8}$ in.	8682.....	$\frac{3}{8}$ in.
8678.....	$\frac{3}{16}$ in.	8683.....	$\frac{1}{4}$ in.
8679.....	$\frac{1}{8}$ in.	8684.....	$\frac{3}{8}$ in.
8680.....	$\frac{3}{16}$ in.	8685.....	$\frac{3}{8}$ in.
8681.....	$\frac{1}{8}$ in.		

Plumber's Hand Drill

WITH MANY NEW FEATURES



For drilling out broken faucet screws and broken tank valve screws. Takes $9/32$ " tap.

No. 8689.....Drill as Shown

Extractor, Tap and Die

For Refill Tubes and Float Rods



For Extracting Refill Tubes from Ballcocks and Re-threading the tubes, also for extracting Float rods and Re-threading the rods.

No. 8690— $\frac{1}{4}$ —40 Tap and Die for Refill Tube, and Extractor.
No. 8691— $\frac{1}{4}$ —20 Tap and Die for Float Rods and Extractor.



Woodward Wanger Co.

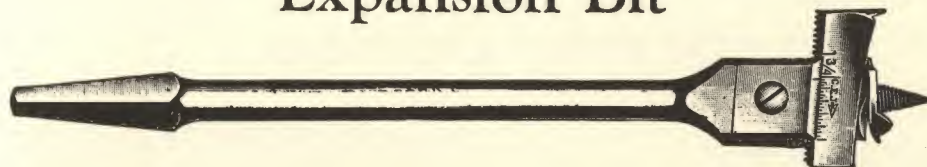


Wood Auger Bits,



No.	Drills holes for	Size	No.	Drills holes for	Size
8695	.....	1/2"	8700	.....	1 1/4"
8696	 3/8" I. P.	3/4"	8701	 1" I. P.	1 1/2"
8697	 1/2" I. P.	7/8"	8702	 1 1/4" I. P.	1 3/4"
8698	.....	1"	8703	 1 1/2" I. P.	2"
8699	 3/4"	1 1/8"	8703-A	 2" I. P.	2 1/2"

Expansion Bit



This Bit is capable of being adjusted to a limit of 1/1000 of an inch by use of the micrometer screw which controls the adjustment. When adjusted to the desired size, any number of holes can be bored, and each hole will be of exactly the same size, as the cutters cannot slip or creep.

No.	Description	Capacity of Cutters
8704	 Bit with two cutters.	5/8 to 1 1/8 in., 1 1/8 to 2 in.
8705	 Bit with two cutters.	7/8 to 1 3/4 in., 1 3/4 to 3 in.

Wiping Cloths

Herringbone



Plain No.	Treated No.	Size
8719	T-8719	2 1/2 x 2 1/2 in.
8721	T-8721	3 x 3 in.
8723	T-8723	3 1/2 x 3 1/2 in.
8724	T-8724	3 1/2 x 4 in.

Moleskin Wiping Cloths

Plain No.	Treated No.	Size
8744	T-8744	2 1/2 x 2 1/2 in.
8746	T-8746	3 x 3 in.
8748	T-8748	3 1/2 x 3 1/2 in.
8749	T-8749	3 1/2 x 4 in.

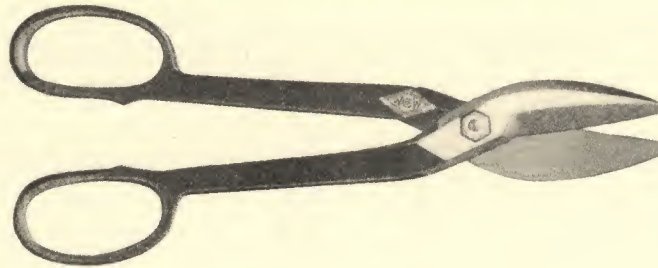




Woodward Wanger Co.



Tinners' Snips



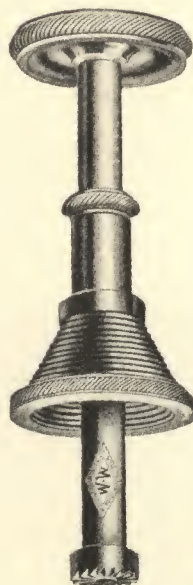
No.					
8765	.....	Cuts 4 in.	8767	.....	Cuts 3 in.
8766	.....	Cuts 3 1/2 in.	8768	.....	Cuts 2 1/2 in.

Screw Drivers



No.	Length of Blade
8788	 4 in.
8789	 6 in.
8790	 8 in.
8791	 10 in.

Bibb Seat Dresser



No.	Description
8793	Faucet Seat Dresser, complete with one each of the following sizes of cutters:
	Cutter, 7/8 in. diam. for use with 3/8 in. Faucet.
	Cutter, 5/8 in. diam. for use with 1/2 in. Faucet.
	Cutter, 3/4 in. diam. for use with 5/8 in. Faucet.
	Cutter, 1/8 in. diam. for use with 3/4 in. Faucet.

EXTRA CUTTERS

No.	Size
8794	 7/8 in.
8795	 5/8 in.
8796	 3/4 in.
8797	 1/8 in.
8798	 1 in.



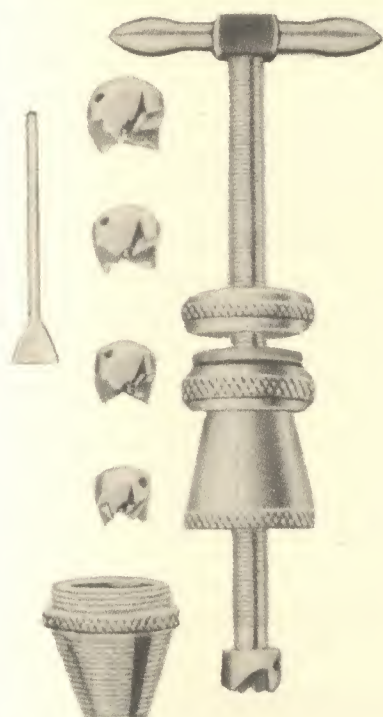
Woodward Wanger Co.



Ferrell Bibb Seat Dresser

Outstanding Features

(1) The New Improved Ferrell Reseating Tool will produce a raised round seat. (2) It is non-chattering and compact, taking up little room in the tool kit. (3) The simplicity of it makes it easy to operate. (4) It does the finest of workmanship which is 100% true. (5) The extra-long feed screw will permit it to be used on all types of bibbs and built-in fixtures. (6) The new friction lock nut and swivel arrangement permits you to feed and cut but a small fraction of an inch without loosening the friction nut. (7) Will avoid digging into the seat or cutting seat too deep.



Catalog Numbers of the Four Cutters Supplied With No. 8800

No. 8800-C	Size 11/16" O. D.	No. 8800-B	Size 5/8" O. D.
No. 8800-E	Size 27/32" O. D.	No. 8800-D	Size 3/4" O. D.

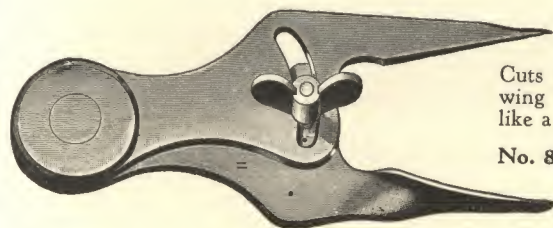
No. 8800—Ferrell Bibb Seat Dresser, as Illustrated

This set includes one 8 1/2" Feed Screw, for use on Built-in Tub Fixtures. One Swivel Body with Lock Nut. One Cushion Washer. One Male Combination Reducing Cone with inside and outside thread. Four self-aligning Tool Steel Cutters that cut a raised, round seat. One pin for removing cutters.

Other Cutters That Also Fit No. 8800 Tool

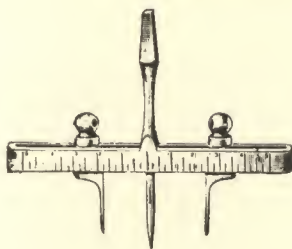
No. 8800-A	Size 1/2" O. D.	No. 8800-H	Size 55/64" O. D.	No. 8800-L	Size 1" O. D.
No. 8800-F	Size 9/16" O. D.	No. 8800-J	Size 13/16" O. D.	No. 8800-M	Size 1 1/8" O. D.
No. 8800-G	Size 21/32" O. D.	No. 8800-K	Size 15/16" O. D.	No. 8800-N	Size 1 1/4" O. D.

Washer Cutter



Cuts washers up to 3 3/4". Handy to carry, easily operated. One wing acts as a centering pin, the other as a cutter, very much like a compass. Nickel Plated.

No. 8814 4 1/4" long



Registering Washer Cutter

No. 8815

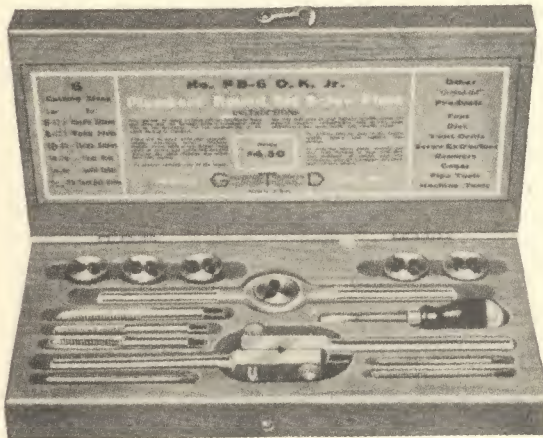
For cutting washers out of Rubber Sheet Packing or similar material. Can be set accurately to cut washers from 1/2" to 4" in diameter. Made of tool steel.



Woodward Wanger Co.



Tap and Die Set



This set of Taps and Dies is indispensable for servicing bathroom fixtures and general faucet repairs.

DESCRIPTION

No. 8842—Complete set of Taps and Dies, includes one stock, one tap wrench, one small screwdriver and one each tap and die of the following sizes:

DIES

No. 8848—8-32
No. 8850—10-32
No. 8851—10-24
No. 8852—10-28
No. 8853— $\frac{1}{4}$ -20
No. 8854— $\frac{1}{4}$ -40

TAPS

No. 8859—8-32
No. 8861—10-32
No. 8862—10-24
No. 8863—10-28
No. 8864— $\frac{1}{4}$ -20
No. 8865— $\frac{1}{4}$ -40

Diameter of Dies, 13/16" O. D. Length of stock, 6 $\frac{1}{4}$ "

Stocks and Dies

Improved Pattern Adjustable Stocks and Pipe Dies

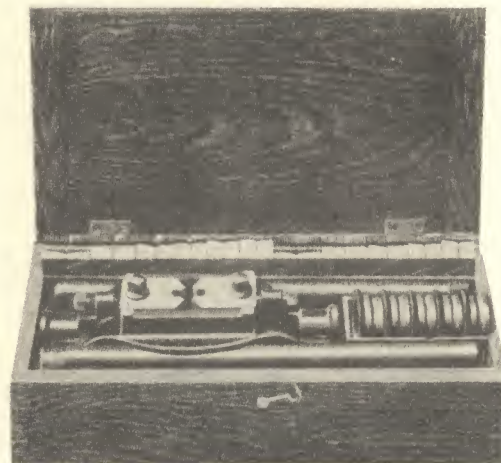
ARMSTRONG PATTERN

NO. 1 STOCK AND DIES

No.	Description
8875	Complete Set—Consisting of one No. 1 Stock and one each $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$ and $\frac{1}{2}$ in. Dies
8877	No. 1 Stock only

NO. 2 STOCK AND DIES

No.	Description
8890	Complete Set—Consisting of one No. 2 Stock and one each $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1 in. Dies
8891	No. 2 Stock only



EXTRA DIES FOR NO. 1 STOCK

No.	Size
8879	$\frac{1}{8}$ in.
8880	$\frac{1}{4}$ in.
8881	$\frac{3}{8}$ in.
8882	$\frac{1}{2}$ in.

EXTRA DIES FOR NO. 2 STOCK

No.	Size
8892	$\frac{1}{8}$ in.
8893	$\frac{1}{4}$ in.
8894	$\frac{3}{8}$ in.
8895	$\frac{1}{2}$ in.
8896	$\frac{3}{4}$ in.
8897	1 in.

EXTRA PARTS FOR NO. 1 STOCK

No.	Description
8883	Guide
8885	Handles
8886	Collar Screw
8887	Adjusting Screw
8888	Guide Screw
8889	Wrench

EXTRA PARTS FOR NO. 2 STOCK

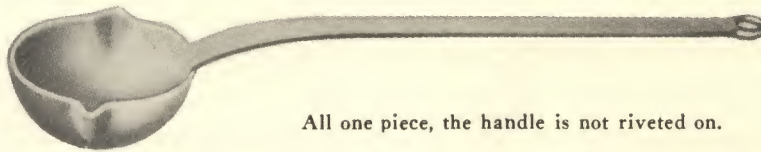
No.	Description
8898	Guide
8899	Handles
8900	Collar Screw
8901	Adjusting Screw
8902	Guide Screw
8903	Wrench



Woodward Wanger Co.



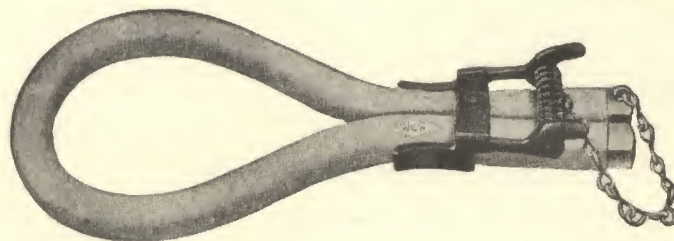
Ladles



All one piece, the handle is not riveted on.

No.	Diameter	Depth	Length
9122	2½ in.	1¼ in.	13 in.
9123	3 in.	1⅜ in.	14 in.
9124	3½ in.	1½ in.	15 in.
9125	4 in.	1¾ in.	16 in.
9126	5 in.	2 in.	17 in.

Asbestos Joint Runners



Asbestos Joint Runners—Square

Made from good quality of long fibered Asbestos. Well finished and fitted with strong, durable Clamp.

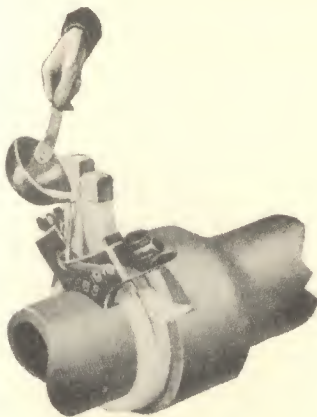
No.	Description
9130.....	For Pipe, 2, 3 and 4 in. Diameter
9131.....	For Pipe, 4, 5 and 6 in. Diameter
9132.....	For Pipe, 6, 8 and 10 in. Diameter
9133.....	Spring Clamp with Chain for use with above Joint Runners

Peerless Joint Runner

The clamps and thumb screws are of **wrought steel** and the pouring cup of **malleable iron**.

In operating this clamp it is only necessary to **release one end of the rope**. The steel thumb screws work on a **multiple thread** making the operation very rapid.

The "PEERLESS" holds the rope more snugly and firmly around the pipe than others, and as it stands upright, it is more convenient to pour into than the old style joint runner.



No.	Description
9134.....	For Pipe, all sizes, 2-6 in.



Woodward Wanger Co.



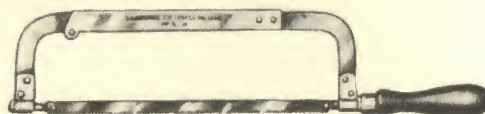
Hack Saw Frames



No. 9149

Pistol-Grip Hack Saw Frame. Polished Nickel Plate. Adjustable for blades 8" to 12" long. Open-grip, hard-rubber handle. Frame of high-grade steel, 3/16" thick and 11/16" wide. Will cut at four different angles.

No. 9149Hack Saw Frame



No. 9150

Extension Frame. Polished Nickel Plate. Made of high-grade steel, 3/16" thick and 5/8" wide. Black lacquered polished wood handle. Adjustable for blades 8" to 12" long. Will cut at four different angles.

No. 9150Hack Saw Frame

Midget Hack Saw Frame



A handy tool for the Master Plumber. Inexpensive and indispensable. For those small and hard-to-get-at places. Takes a 6" Wave-Set Blade; 32 teeth to the inch.

No. 9151Frame Only

Blades for Midget Frame

These Wave-Set Blades are 6" long and have 32 teeth to the inch. Thickness, .014. Made expressly for use with Midget Hack Saw Frame No. 9151.

No. 9152Midget Blades

Hack Saw Blades



The above cut shows the principle of our "Flexible Back" Blades. The teeth only are hardened, the back remaining in an untempered condition, which prevents the blade breaking, thus insuring the user full efficiency until the teeth are worn. Made of Tungsten Alloy Steel.

32 Teeth to Inch			24 Teeth to Inch		
No.		Size	No.		Size
9155	.....	8 in.	9159	.....	8 in.
9157	.....	10 in.	9161	.....	10 in.
9158	.....	12 in.	9162	.....	12 in.

High Speed Blades

Made of Molybdenum High-Speed Steel. The backs of the blades are toughened to give them flexibility, and the teeth edges hardened for durability. Will stand all kinds of hard usage, even abuse, without breaking. Sharp twists and kinks, which are the main reasons for blade breakage, are absorbed without damaging these tough High-Speed blades.

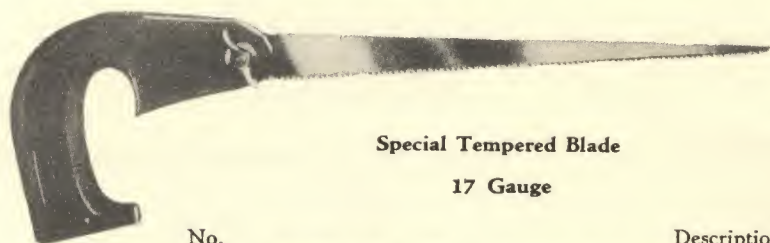
No. 9169—24 Teeth10" Blades
(Dozen lots only)



Woodward Wanger Co.



Compass Saws



Special Tempered Blade

17 Gauge

No.	Description
9163	Compass Saw Nest (Including one each, 10 in., 12 in. 14 in. Blades and Wood Handle)

The 14 in. Blade furnished with this Nest is specially tempered for cutting wood in which nails are imbedded, lead pipe, and other obstructions encountered in the ordinary course of plumbing.

Compass Saw Blades

No.	Size	Description
9164.....	10 in.	Small Blades
9165.....	12 in.	Similar to 10 in. Blade.
9166.....	14 in.	Medium size Blade illustrated in No. 9163
9166-A.....	14 in.	Tempered to cut nails, lead pipe, etc.
9167.....	16 in.	Large Blade,

Wood Handles for Compass Saws

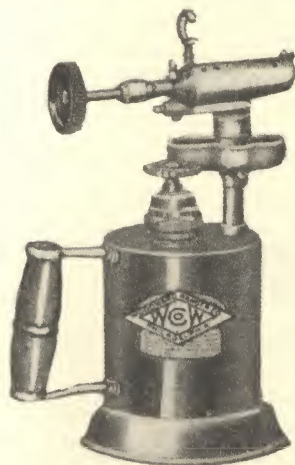
No.	
9168.....	Wood Handle, with Tightener



Aluminum Handles for Compass Saws

No. 9171	Aluminum Handle with Tightener
----------------	--------------------------------

Plumbers' Torch



FOR GASOLINE

Reservoirs of heavy, seamless, drawn brass. Patented "Never Leak" Pumps have the screw-down feature. When plunger is screwed down and out of the way, the tapered point on the bottom of the plunger acts as a positive check valve, providing safety and preventing leaks. The funnel-shaped brass bottoms are fitted with filler plugs to permit easy bottom filling. One of the most popular of all Plumber's Torches.

No.	
9173.....	Plumber's Torch (One quart capacity)

PARTS FOR TORCH

No.	
9174	Air Pump
9175	Corks
9176	Springs
9177	Cups
9178	Burner, complete

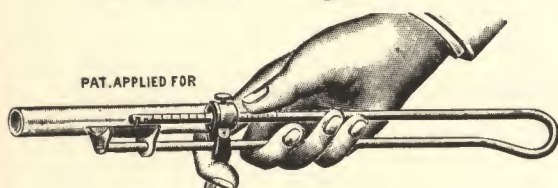


Woodward Wanger Co.



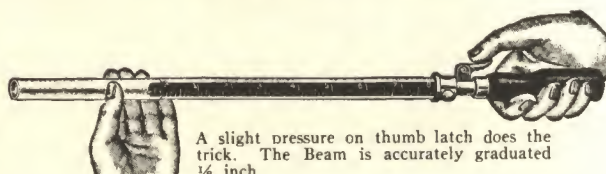
Gauge Glass Cutters

The Fletcher Gauge Glass Cutter



No.	Description
9184.....	Gauge Glass Cutter

The Wilkins Gauge Glass Cutter



No.	Capacity	Weight
9185.....	Cuts to 8 in. lengths	6 oz.

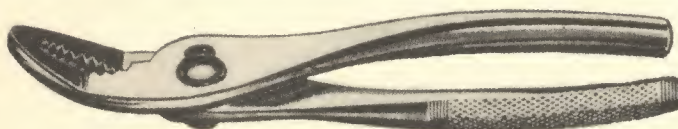
A slight pressure on thumb latch does the trick. The Beam is accurately graduated $\frac{1}{8}$ inch.

Plumber's Pliers



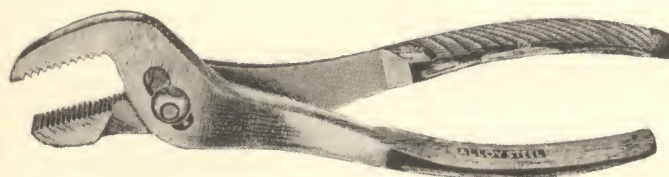
Made with knurled handles. A well-proportioned, drop-forged, combination plier with wire cutter.

No. 9186	6 in.
No. 9186A	8 in.
No. 9186B	10 in.



This bent-nosed plier is made with 30-degree offset nose, which permits its use in many places that are inaccessible with the ordinary straight-nose plier.

No. 9187	8 in.
No. 9187A	10 in.



Made of finest-grade alloy steel Has three adjustments for extending the opening, instead of the usual two. Jaws so constructed that it can be used where ordinary pliers will not fit.

No. 9188	Regular Weight.....	8 in.
No. 9188A	Thin design, four adjustments ..	10 in.

Bending Springs



Made of Spiral Crucible Tool Spring

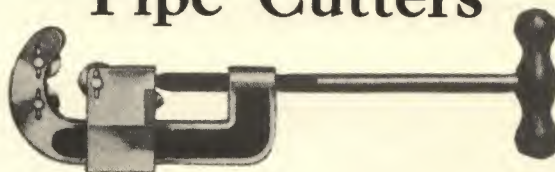
No.	Size	No.	Size
9190	1 in.	9192	1 1/2 in.
9191	1 1/4 in.	9193	2 in.



Woodward Wanger Co.



Pipe Cutters



Barnes Three-Wheel Pipe Cutters

The Three-Wheel Cutter is especially suited for use in close work, where it is impossible to revolve the cutter entirely around the pipe. Both Wheels and Pins are made from the best grade of crucible steel, carefully machined and hardened in oil to give additional toughness.

No.	Description	
9197	Pipe Cutter No. 1.....	Cuts Pipe $\frac{1}{8}$ to 1 in.
9198	Pipe Cutter No. 2.....	Cuts Pipe $\frac{1}{2}$ to 2 in.
9199	Pipe Cutter No. 3.....	Cuts Pipe $1\frac{1}{2}$ to 3 in.

Pipe Cutter Repair Parts



Barnes Pipe Cutter Parts

WHEELS

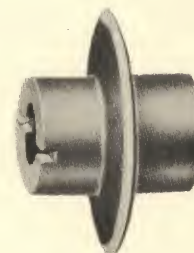
No.	Description
9230	Wheels for No. 1 Barnes
9231	Wheels for No. 2 Barnes
9232	Wheels for No. 3 Barnes
9233	Wheels for No. 4 Barnes



Saunders Pipe Cutter Parts

WHEELS

No.	Description
9240	Wheels for No. 1 Saunders
9241	Wheels for No. 2 Saunders
9242	Wheels for No. 3 Saunders



Trimo Pipe Cutter Parts

WHEELS

No.	Description
9255	Wheels for No. 1 Trimo
9256	Wheels for No. 2 Trimo



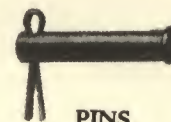
PINS

No.	Description
9235	Pins for No. 1 Barnes
9236	Pins for No. 2 Barnes
9237	Pins for No. 3 Barnes
9238	Pins for No. 4 Barnes



PINS

No.	Description
9245	Pins for No. 1 Saunders
9246	Pins for No. 2 Saunders
9247	Pins for No. 3 Saunders



PINS

No.	Description
9258	Pins for No. 1 Trimo
9259	Pins for No. 2 Trimo

RIGID



CUTTER

No. 9210—Wheel for No. 1 Cutter
No. 9211—Wheel for No. 2 Cutter



ROLLERS

No.	Description
9250	Rollers for No. 1 Saunders
9251	Rollers for No. 2 Saunders
9252	Rollers for No. 3 Saunders



ROLLERS

No.	Description
9261	Rollers for No. 1 Trimo
9262	Rollers for No. 2 Trimo



Woodward Wanger Co.

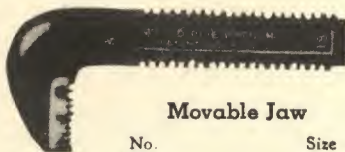


Walworth Walco Pipe Wrenches



No.	Size	Takes Pipe
9293.....	6 in.	$\frac{1}{8}$ to $\frac{1}{2}$ in.
9294.....	8 in.	$\frac{1}{8}$ to $\frac{3}{4}$ in.
9295.....	10 in.	$\frac{1}{8}$ to 1 in.
9296.....	14 in.	$\frac{1}{4}$ to $1\frac{1}{2}$ in.

No.	Size	Takes Pipe
9297.....	18 in.	$\frac{1}{4}$ to 2 in.
9298.....	24 in.	$\frac{1}{4}$ to $2\frac{1}{2}$ in.
9299.....	36 in.	$\frac{1}{4}$ to $3\frac{1}{2}$ in.



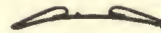
Movable Jaw

No.	Size
9300.....	6 in.
9301.....	8 in.
9302.....	10 in.
9303.....	14 in.
9304.....	18 in.
9305.....	24 in.
9306.....	36 in.



Renewable Lower Jaw

No.	Size
9320.....	6 in.
9321.....	8 in.
9322.....	10 in.
9323.....	14 in.
9324.....	18 in.
9325.....	24 in.
9326.....	36 in.



Spring

No.	Size
9308.....	6 in.
9309.....	8 in.
9310.....	10 in.
9311.....	14 in.
9312.....	18 in.
9313.....	24 in.
9314.....	36 in.

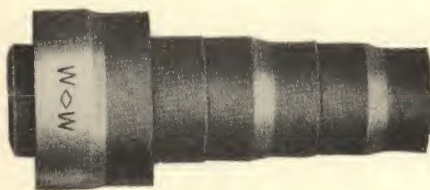


Nut

No.	Size
9328.....	6 in.
9329.....	8 in.
9330.....	10 in.
9331.....	14 in.
9332.....	18 in.
9333.....	24 in.
9334.....	36 in.

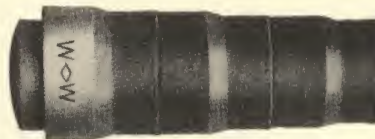
Tubing Expanders

For Joining and Lengthening Chrome and Nickel Plated Tubing



No. 9422

No.	Description
9422	Complete Set, for $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ and 2 in. tubing



No. 9423

No.	Description
9423	For $1\frac{1}{4}$, $1\frac{3}{8}$ and $1\frac{1}{2}$ in. tubing only



No. 9424

No.	Description
9424	For 2 in. tubing only

The "W-W" Tubing Expander in Use



The "W-W" Tubing Expanders are made of high-grade tool steel and will last indefinitely.

By driving the tool into the end of tubing it is expanded sufficiently for a distance of $\frac{1}{2}$ inch, so that another piece of tubing of the same size can be inserted and sweat in. Tubing lengthened by this method always presents an attractive appearance,



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The Warnock Wrench



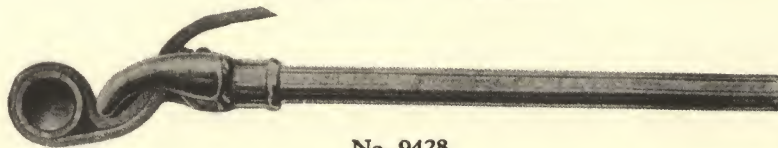
For Polished and Nickel Plated Pipe

This wrench has been, for many years, the standard among plumbers for a light, convenient and reliable tool for installing polished and N. P. pipe. Furnished complete with looped strap.

No.	Description
9426.....	12 in. Takes Pipe $\frac{1}{4}$ to 2 in.
9427.....	18 in. Takes Pipe $\frac{1}{2}$ to 5 in.

The Reed Wrench

For Nickel
Plated Pipe



No. 9428

No.	Description
9428	12 in. Takes Pipe $\frac{1}{8}$ to 2 in.

Straps for Wrenches for Nickel Plated Pipe



Strap (Plain)

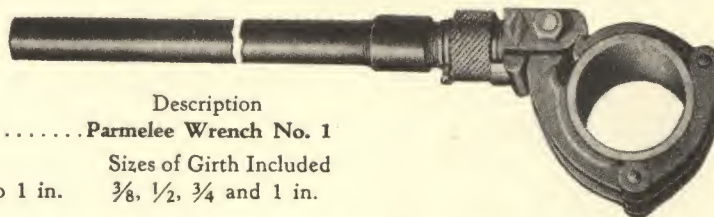
No.	Description
9433.....	12 in. Plain Strap for 12 in. Wrench
9434.....	18 in. Plain Strap for 18 in. Wrench



Strap (Looped)

9436	12 in. Looped Strap for 12 in. Wrench
9437	18 in. Looped Strap for 18 in. Wrench

The Parmelee Wrench



No.	Description
9442.....	Parmelee Wrench No. 1
Takes Pipe $\frac{3}{8}$ to 1 in.	
Sizes of Girth Included $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1 in.	

Extra Girths for Parmelee Wrenches

GIRTHS FOR NO. 1 WRENCH

No.	To Hold Pipe	No.	To Hold Pipe
9446	$\frac{3}{8}$ in.	9448	$\frac{3}{4}$ in.
9447.....	$\frac{1}{2}$ in.	9449	1 in.



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Soldering Coppers

Prices do not include handles.



No.	Weight Each	Weight Per Pair	No.	Weight Each	Weight Per Pair
9470	1/2 lb.	1 lb.	9473	1 1/2 lbs.	3 lbs.
9471	3/4 lb.	1 1/2 lbs.	9474	2 lbs.	4 lbs.
9472	1 lb.	2 lbs.			

Soldering Iron Handles



No.	Adjustable Pattern
9475	Adjustable



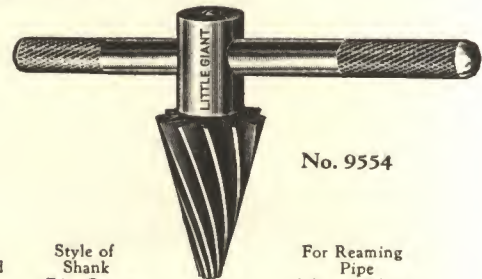
No.	Regular Pattern
9476	Regular

Spiral Fluted Burring Reamers



Nos. 9550-9553

No.	Total Length	Length of Flute	Size at Point	Size at Large end
9550.....	3 in.	1 in.	3/8 in.	3/4 in.
9551.....	3 1/8 in.	1 1/8 in.	1/2 in.	1 1/2 in.
9552.....	4 1/8 in.	2 1/8 in.	1/2 in.	1 3/4 in.
9553.....	5 1/4 in.	2 1/2 in.	1 1/8 in.	2 3/8 in.
9554.....	5 3/8 in.	3 1/8 in.	1 1/8 in.	2 3/8 in.



No. 9554

Style of Shank	For Reaming Pipe
Bit Brace	1/8 to 1/2 in.
Bit Brace	3/8 to 1 in.
Bit Brace	1/4 to 1 1/4 in.
Bit Brace	1/4 to 2 in.
T Handle 20 in. long	1/4 to 2 in.

Copper Tube Fitting Brushes



Made of Stainless Steel Wire. Strong, resilient, wear resisting and rustproof, secured in a 4-ply wire handle, with comfortable hand-fitting wood grip.

No.	Fitting Size	Brush Dia.
9653	1/2"	3/2"
9654	5/8"	1 1/8"
9655	3/4"	1 3/8"
9656	7/8"	1 5/8"
9657	1 1/8"	1 1/4"



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Soil Pipe Testing Plugs

WING NUT PATTERN

No.	Size
9600	2 in.
9601	3 in.
9602	4 in.
9603	5 in.
9604	6 in.

"Y" BRANCH DOUBLE TESTING PLUGS

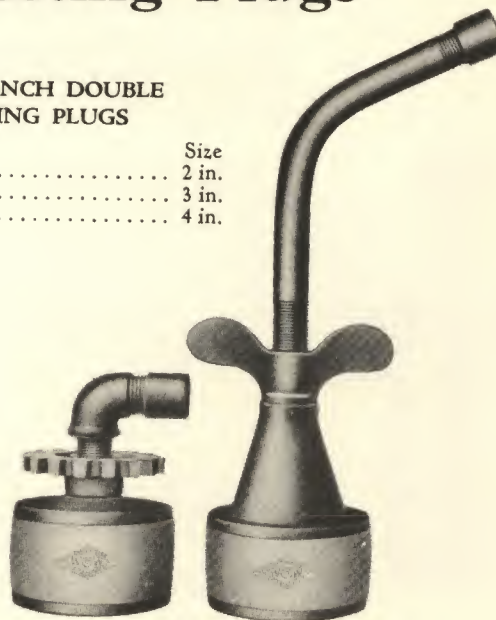
No.	Size
9614	2 in.
9615	3 in.
9616	4 in.

RATCHET PATTERN

No.	Size
9605	2 in.
9606	3 in.
9607	4 in.
9608	5 in.
9609	6 in.

WRENCH FOR RATCHET TESTING PLUG

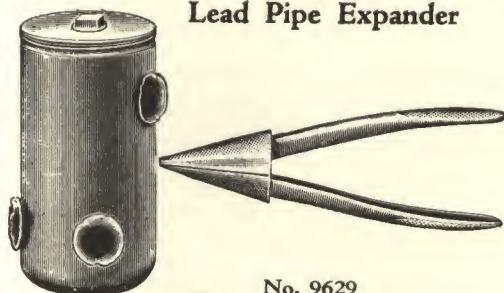
No.	
9610	Wrench



Nos. 9605-9609

Nos. 9600-9604

Lead Pipe Expander



No. 9629

No.	
9629	Expander

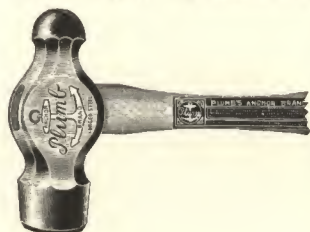
Lead Pipe Cutter



No.	Capacity up to 1½ in. pipe
9630	Cutter

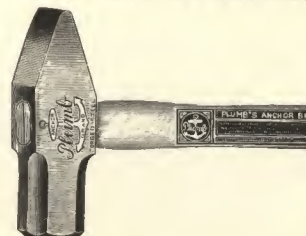
Hammers

Ball-Pein Hammers



No.	Weight
9643	1 lb.
9644	1¼ lb.

Plumbers' Hammers



No.	Weight
9645	1 lb.
9646	1¼ lb.

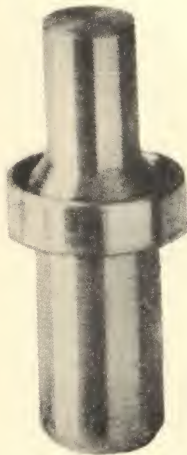


Woodward Wanger Co.



Spreading and Flaring Tools

Hardened and Rust-proof



Flaring Tool

Easy to Use. Hardened and rust-proof. Makes clean smooth flares.

No.	Size
9659	1/4"
9660	3/8"
9661	1/2"
9662	3/4"
9663	1"

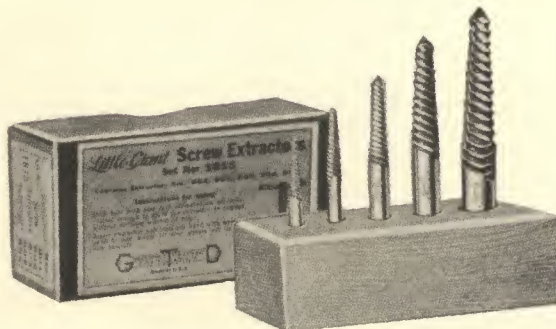


Spreading Tool

Eliminates couplings. No Tedious Sweat Soldering. Tool hardened and ground.

No.	Size
9666	1/4"
9667	3/8"
9668	1/2"
9669	3/4"
9670	1"

Screw Extractor Set



No. 9671

Contains 5 Screw Extractors from 1/8" to 7/16". They take a quick and positive grip which will "start" the most deeply imbedded screw or stud, and turn it out on its own threads. Sold only as a set. A very handy and frequently needed tool set!

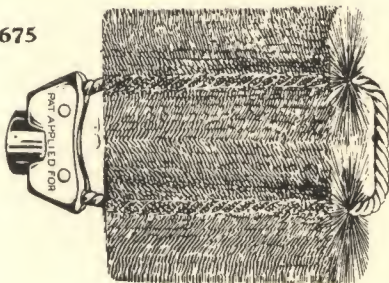


Woodward Wanger Co.



Wire Heater Brushes Boiler Tube Cleaners

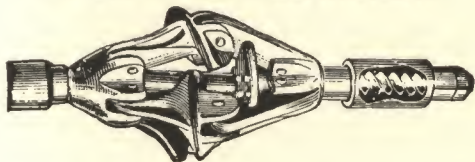
No. 9675



No. 9675 $1\frac{3}{4}'' \times 4\frac{1}{2}''$
No. 9675-A $2'' \times 5''$
No. 9675-B $2\frac{1}{2}'' \times 6''$

Ingalls Type Improved Boiler Tube Cleaner

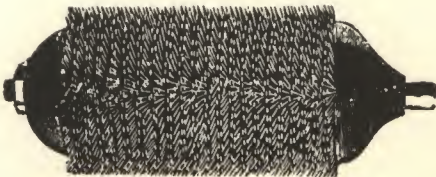
With and Without Brush Attachment



No. 9677

No. 9677 in sizes from
 $1\frac{1}{2}'' \times 5''$ in diameter
(See Price Book or write for Prices)

Flue Brush



No. 9678 in sizes from $1\frac{1}{2}''$ diameter
to $6''$ diameter



No. 9676

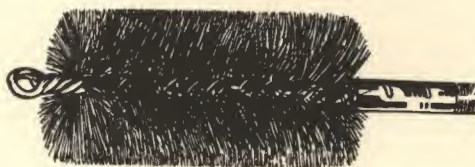
No. 9676 $2'' \times 4'' \times 6''$
No. 9676-A $2\frac{1}{2}'' \times 4\frac{1}{2}'' \times 6''$
No. 9676-B $3'' \times 5'' \times 6''$

Oval Spiral Heater Brush



No.	Measurements
9679	$1\frac{3}{8}'' \times 3\frac{1}{4}'' \times 4''$
9679-A	$2'' \times 3\frac{3}{4}'' \times 5''$
9679-B	$2\frac{3}{4}'' \times 4\frac{1}{2}'' \times 6''$

Fine Wire Brush



No. 9680 in sizes from $1\frac{1}{4}''$ diameter
to $6''$ diameter

Hard Spiral Flue Brush



No. 9681 in sizes from $1\frac{1}{4}''$ diameter
to $6''$ diameter



Woodward Wanger Co.





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